

FLIGHT

First Aero Weekly in the World.

Founder and Editor : STANLEY SPOONER.

A Journal devoted to the Interests, Practice and Progress of Aerial Locomotion and Transport.

OFFICIAL ORGAN OF THE ROYAL AERO CLUB OF THE UNITED KINGDOM.

No. 409. (No. 43, Vol. VIII.)

OCTOBER 26, 1916.

Weekly. Price 1d.
Post Free, 1½d.

Flight.

Editorial Office: 44, ST. MARTIN'S LANE, LONDON, W.C.

Telegrams: Truditor, Westrand, London. Telephone: Gerrard 1828.

Annual Subscription Rates, Post Free.

United Kingdom .. 6s. 6d. Abroad 11s. 6d.

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TO OUR READERS.

The Supply of "FLIGHT." Important Notice.

Order "FLIGHT" to be either delivered or reserved for you regularly.

As the demand for "FLIGHT" is so great each week, it is of the utmost importance that readers should place their orders *firmly* for copies of "FLIGHT" at the bookstalls, their newsagents, or direct from the publishers, at 44, St. Martin's Lane, W.C., if they wish to secure a copy every week and avoid disappointment. The stringent Government restrictions in regard to the supply of printing paper necessitates this precaution in order that only actual numbers required are printed, and all wastage by unsold copies may thereby be reduced to a minimum, if not eliminated.

THE PUBLISHERS.

EDITORIAL COMMENT.

By the courtesy of the Naval and Military authorities we are enabled this week to publish a very complete series of photographs and descriptive articles dealing with the Zeppelin airship "L. 33," which was brought down somewhere in Essex on the night of 24th September. The photographs—which were taken by our own photographic staff—form a complete record of the essential parts of the wrecked airship, and are of surpassing interest in view of the halo of mystery which has hitherto

surrounded the construction of the latest of the "super-Zeppelins," and we may thus with some amount of justice claim for the present issue of FLIGHT a more than ordinarily historical interest.

In no case of the destruction of one of these craft during the present war has the wreckage retained so well the original lines of the structure as in the case of the "L. 33," nor has one been brought down in so favourable a situation for the eye to take in the immensity of these air-strafters. And, we think, our pictures, supplemented by the letterpress, make the most of the circumstances. That, however, is for our readers to judge.

Trade After the War.

The President of the Board of Trade has appointed a committee to consider the position after the war, especially in relation to international competition, of the lead, copper, tin and such other of the non-ferrous metal trades as may be referred to the committee, and to report what measures, if any, are necessary or desirable in order to safeguard that position. The composition of the committee is one that must meet with thorough approval, since it is lacking altogether in the official element, every single one of its members being closely identified with one or other of the trades concerned. Initially, this is just as it should be, inasmuch as such a committee should be able to carry on its investigations and discussions, and to make its report, free from the deterrent influence of officialism and politics. So far, so good, but we always have to keep in mind the fact that no matter how carefully a committee may investigate and report, the last word lies with the official departments. Therefore, while we are in the

most perfect accord with the principle of appointing these investigating committees, it will not do to delude ourselves into the belief that that is all that is necessary to ensure our trade position after the war. Be the recommendations of these committees never so sound, we may well find that they conflict in some way with, let us say for the sake of example, the tariff views of the dominant party in the Government, and are thus foredoomed to be indefinitely pigeon-holed, and in the meantime the appointment of the committees has been the means of the thinking public being kept quiet for the time. It will in no wise do for the business interests of the country to rest content with the appointment of departmental committees. These are all very well in their way, and may doubtless be relied upon to collect and collate a large amount of useful data as a guide to our commercial policy after the war. That is not enough, however. The British manufacturer and trader will have to help himself in addition. He will have to organise in order, for one thing, to compel the Government to give effect to the considered recommendations of such a committee as that which forms the present basis for discussion. He will have to organise to take advantage of the new situation created by the carrying into effect of any such recommendations as those implied, and in this connection we would draw the attention of our readers to a letter, *à propos* this same aspect of the case, which we print in our correspondence columns. Our correspondent very rightly says that we shall probably find that British trades and industries will progress and flourish just in proportion as they concentrate their energies now upon perfecting their organisations and co-operating in a commercial campaign conducted in every corner of the world. It is of no avail to practise the policy of wait and see what the Government is going to do to further British trade interests. The thing to be done is to go out and capture the trade first, and then bring the necessary pressure to bear on the Government to ensure that we are given a fair field in the world's markets—not to await the achievement of the fair field before beginning on the campaign. That way will lie disaster. And, be it said, it is not the way the Germans are going to work. We know that when peace comes the Germans will have to begin over again with all the handicap they have created for themselves by their methods of frightfulness, plus any additional disabilities that may be imposed by the Allied nations in the way of restrictions on international commerce. But we know they are not sitting down to wait and see what those disabilities are going to be before making their preparations to meet and defeat them. On the contrary, all the news that filters through indicates that they are preparing for the commercial and shipping war with the same careful elaboration that characterised their preparations for military war. It is for the British industrial community to see that it is not a case of the six divisions over again.

A New Development of War.

In the reports of the recent fighting on the Somme front, the official French reports have made mention for the first time of aviators actually taking part in the infantry attacks. Apparently these aviators pre-

cede each attacking wave of infantry by a few yards, flying extraordinarily low—sometimes at no more than 300 feet—dropping bombs on the enemy trenches and signalling back to the advancing infantry.

This is a development which at first sight would lead to the supposition that the casualties among the aviators detailed for this duty must be relatively enormous. On the contrary, however, the reports assure us that they are extraordinarily light.

To the one versed in the lessons of practical war, there is really nothing surprising in this. The psychology of the fighting man is a peculiar thing, and nothing produces so much effect as the unexpected or that which is imperfectly understood. It is one thing to contemplate in cold blood the anticipation of some new method of attack, but too often quite another to meet it when it comes. Theoretically, it should be the easiest thing in the world to bring down aviators flying low over trenches, and so indeed it would be in practice, but for the distraction caused by attack from in front and from overhead at the same time. The safety of the attacking airmen lies in the element of uncertainty of action this dual attack produces on the enemy. It is analogous to the case of the sportsman who puts up two birds, cannot make up his mind on the instant which to take first—and misses both when he does fire. It would require a much higher standard of fire discipline—as distinct from what may be called parade discipline—than is apparent in the German army of the Somme to deal effectively with both kinds of attack at once. The success of the new tactics lies, therefore, in the unexpected character of it and the demoralisation, for that is the true word to be applied to it, of its effect. Possibly the Hun will get used to it in time and learn how to deal with it. By then something else will have been devised to get his nerves on the raw edge. The present interest of the thing lies in the indication it affords of the extent to which our Allies and ourselves hold the mastery of the air and the contempt of the enemy felt by our respective air services. It seems the very apotheosis of the "personal ascendancy" upon which the *communiqués* insist.

To Help British Trade.

In connection with the announcement of the reorganisation of the Commercial Intelligence and Exhibition Branches of the Board of Trade, we have been favoured with a copy of a letter addressed to Mr. Runciman by Messrs. Benn Bros., who are the publishers of a number of trade journals. In this letter it is pointed out with perfect truth that the usefulness of both these Departments has in the past been seriously curtailed by the publication of the *Board of Trade Journal* and the setting up of Government copyright in Consular reports.

The letter goes on to say that there are in the country probably a thousand trade papers published; there are certainly some hundreds of well-established and powerful journals, many of them with large circulation. If instead of appearing to compete with these, the Board of Trade were to abolish its own publication and utilise the whole body of the trade Press, its work and activities would receive many times the publicity

and interest which they now enjoy. If the effort which is now absorbed in the production of the *Journal* were devoted to a Press Department charged with the dissemination of Board of Trade news, the usefulness of the Board's efforts and the interest in its doings would be much increased.

The point that the *Journal* is in competition with the trade Press in several ways, and that the suggestion to abolish it savours of self-interest, is countered by the reply that the trade Press of the country has an advertising revenue of some £2,000,000 a year, and can therefore afford to ignore so trifling a matter as the competition of the official publication.

We are in the most entire agreement with the whole of the points traversed by the letter with which we are dealing. The *Board of Trade Journal* is, doubtless, well edited and as well compiled, but the main point is that we do not want such a publication merely as a contribution to literature. Its main intention is to further the interests of British trade. To a certain extent it does so, but it has a relatively restricted currency, and its information is conveyed in a cumbersome and therefore expensive form. A really well-organised and conducted Press Department would serve the purpose far better, since it would circulate its information to the journals current in the trade to which that information might appeal and to those journals only. Thus there would be ensured an adequate circulation of all specialised news and information, and duplication of effort and cumbersomeness would be avoided. All of which would manifestly be to the great advantage of British trade interests. We trust, therefore, that the suggestions contained in the letter under notice will receive the sympathetic consideration of the President.

**No
Monetary
Gifts
for
Airmen.**

An Army Order has been issued as an addition to King's Regulations, which was published in "FLIGHT" last week and which reads as follows:—

"Officers, warrant-officers, non-commissioned officers and men are forbidden to accept presents in money from public bodies or private individuals in recognition of services rendered in the performance of their duty."

Obviously this Order is the result of the gifts of money made in connection with the bringing down of enemy airships in England. It is quite understandable that individuals and bodies should evince a very praiseworthy desire to recognise the services to the community of the gallant officers and men who have taught the enemy that he cannot any longer raid these shores with impunity. The motive is an altogether admirable one, but we do not think the principle is one that ought to be recognised, or, at least, further exploited. Our air services do their duty because it is their duty, and not from any hope of financial gain. It will be a bad day for those services when any other than that feeling dominates them. Human nature, however, is human nature after all, and we are distinctly of opinion that it is not in the best interests of the Service that rewards in kind should be made to any individuals save officially. To encourage, or even to countenance, the principle of private reward would be to run a grave risk of introducing a spirit that the services are much better without. We have the best of reasons for knowing that these are the sentiments of the Service itself, and that the new Order is welcomed as putting into words something that has always been accepted as an unwritten principle.



(Official photo.)

ON THE WESTERN FRONT.—A group of pilots, who are helping to make history, in front of one of the British machines.

The British Air Service

"PER ARDUA AD ASTRA"

Under this heading are published each week the official announcements of appointments and promotions affecting the Royal Naval Air Service and the Royal Flying Corps (Military Wing) and Central Flying School. These notices are not duplicated. By way of instance, when an appointment to the Royal Naval Air Service is announced by the Admiralty it is published forthwith, but subsequently, when it appears in the LONDON GAZETTE, it is not repeated in this column.

Royal Naval Air Service.

Admiralty, October 17th.

F. B. Rigby granted temp. commission as Lieut., and appointed to the "President," additional, for R.N.A.S., Oct. 14th.

Temp. Flight-Sub-Lieut. H. G. Brackley promoted to Flight-Sub-Lieut., seniority Oct. 1st.

The under-mentioned entered as Proby. Flight Officers for temp. service and appointed to the "President," for R.N.A.S., all date Oct. 22nd: V. R. Cox, W. H. Owen, J. W. Pinder, A. H. Webber, E. H. Jenkins, F. W. Akers, L. T. Clemence, R. L. Brown, J. A. Rudd, H. C. Nutt, M. J. Watson, T. H. Boyd, J. R. Attwell, P. F. T. Luckham, J. H. Broughton, F. L. B. Wood, D. A. Lancaster, A. J. R. F. Johnson and G. M. Emerson.

Admiralty, October 18th.

O. R. Gayford and A. W. Southam granted temp. commissions as Sub-Lieut., R.N.V.R., with seniority Oct. 15th and Oct. 12th respectively.

Admiralty, October 19th.

R. C. Philpott granted a temp. commission as Lieut., R.N.V.R., to date Oct. 18th.

The following granted temp. commission as Sub-Lieut., R.N.V.R., seniority as stated: Chief Petty Officer, A.A.C., N. C. D. Colman and Petty Officer J. C. Spurway, Oct. 17th; J. Milton and S. S. Tyler, Oct. 18th.

Chief Petty Officer, 2nd Grade, A. C. Jones and W. R. Curtis entered as Proby. Flight Officers for temp. service, date Oct. 17th and Oct. 22nd respectively.

Admiralty, October 20th.

T. V. Hughes and J. Coates entered as Proby. Flight Officers for temp. service, and appointed to the "President," additional, for R.N.A.S., date Oct. 19th and 18th respectively.

Admiralty, October 21st.

Temp. Lieut. (R.N.V.R.) T. A. Monckton promoted to Temp. Lieut.-Commander, with seniority Oct. 19th.

The following have been entered as Proby. Flight-Sub-Lieuts. for temp. service, to date as stated: A. C. Reid, Aug. 2nd; T. F. Fergie and A. M. Young, Sept. 27th.

Admiralty, October 23rd.

A. B. Wheldon granted a temp. commission as Lieut., R.N.V.R., with seniority Oct. 21st.

H. G. L. de Whalley and C. F. Pallott granted temp. commissions as Sub-Lieuts., R.N.V.R., with seniority Oct. 21st.

Royal Flying Corps (Military Wing).

London Gazette, October 17th.

Flying Officers.—Temp. 2nd Lieut. J. S. Cooper, York. and Lanc. R., and to be transferred to Gen. List; Sept. 19th. Sept. 22nd: Lieut. W. Halliwell (T.F. Res.); 2nd Lieut. D. S. Hall, Arg. and Suth'd. Highrs. (T.F.). Sept. 23rd: Lieut. H. D. E. Ralfe, Australian Fd. Art.; Temp. 2nd Lieut. W. C. Crawford, Machine Gun Corps, and to be transferred to Gen. List. Sept. 24th: Temp. 2nd Lieut. J. T. Collier, R.A., and to be transferred to Gen. List; 2nd Lieut. L. S. Bowman, R. Lanc. R. (T.F.); Temp. 2nd Lieut. C. A. Brewster-Joske, Gen. List, from a Flying Officer (Ob.), with seniority from Feb. 27th. Sept. 25th: 2nd Lieut. (on prob.) T. H. Butler, Bord. R., Spec. Res., and to be sec'd.; 2nd Lieut. (temp. Lieut.) C. L. Pickering, Ches. R. (T.F.); Temp. Lieut. A. V. Burlton, A.S.C., and to be transferred to General List; 2nd Lieut. (Temp. Lieut.) J. A. Parkinson, R. Lanc. R. (T.F.); Lieut. H. L. Kennedy, 70th Canadian Inf. Bn.; 2nd Lieut. H. C. Baker, Spec. Res. (since deceased); 2nd Lieut. C. E. S. Russell, Spec. Res.; Lieut. C. A. S. Bean, Canadian Gen. List; 2nd Lieut. F. H. Humphreys, Spec. Res.; 2nd Lieut. G. Lea, Spec. Res. 2nd Lieut. A. R. E. Henley, R. Scots (T.F.); Sept. 26th. Sept. 27th: Temp. 2nd Lieut. A. D. S. Catling, Devon R., and to be transferred to Gen. List; 2nd Lieut. D. K. Sworder, Spec. Res.; Temp. 2nd Lieut. (on prob.) L. I. Barker, Gen. List. Sept. 28th: Lieut. C. de P. D. Swain, Wessex (Howitzer) Brig., R.F.A. (T.F.); 2nd Lieut. (on

prob.) R. A. James, Middx. R., Spec. Res., and to be sec'd.; Temp. 2nd Lieut. W. H. Irvine, Gen. List.

Balloon Officers.—2nd Lieut. (Temp. Lieut.) A. M. Van der Byl, H.A.C. (T.F.); Sept. 15th. Sept. 23rd: Temp. Capt. A. J. Mann, A.S.C., and to be transferred to Gen. List; Temp. Lieut. R. S. Lardner, Bedf. R.; 2nd Lieut. C. H. Gimmingham, Herts R. (T.F.); 2nd Lieut. W. H. Chatham, Northn. R., Spec. Res., and to be sec'd.; Temp. 2nd Lieut. W. J. H. Horrocks, Gord. Highrs., and to be transferred to Gen. List; Temp. 2nd Lieut. (on prob.) V. J. Hammond, Gen. List; Temp. 2nd Lieut. (on prob.) S. Orchard, Gen. List; 2nd Lieut. (on prob.) W. P. Bingham, Spec. Res.; Temp. 2nd Lieut. J. L. Greener, Gen. List; Temp. 2nd Lieut. F. J. K. Mason, Gen. List; Temp. 2nd Lieut. F. B. Stevens, Gen. List; 2nd Lieut. (on prob.) F. H. Postlethwaite, Spec. Res.

Adjutants.—Lieut. W. B. Bryans, Norf. R., Spec. Res., and to be sec'd.; Sept. 25th. The appointment of Lieut. (Temp. Capt.) B. H. Bonham-Carter, 40th Pathans, Ind. Army, notified in the *Gazette* of Sept. 28th, is cancelled.

Equipment Officer, 3rd Class.—2nd Lieut. (on prob.) J. D. Coales, Special Reserve; Sept. 1st.

Memorandum.—1st Class Air-Mech. T. N. Gilbert from R.F.C. to be Temp. 2nd Lieut. (on prob.), for duty with the Military Wing of that Corps; Oct. 1st.

Supplementary to Regular Corps.—The under-mentioned 2nd Lieuts. (on prob.) are confirmed in their rank: H. J. Butler, R. M. Charley, T. T. Cumming, H. N. Stradling. The appointment of 2nd Lieut. E. S. Cohen, notified in the *Gazette* of July 27th, 1916, is antedated to June 21st, 1916. The undermentioned to be 2nd Lieuts. (on prob.):—Oct. 7th: W. H. G. Furnivall, W. L. Shaw, H. R. Williamson, J. F. B. Smith, H. Gray, J. H. Fletcher, A. Graham, G. K. Johnson, H. H. Leage, J. E. Terry and H. N. O'Donnell.

London Gazette Supplement, October 18th.

Flying Officers.—Temp. 2nd Lieut. (on prob.) G. F. Mackay, Gen. List; Sept. 28th. Sept. 29th: Lieut. K. R. G. Fenwick, R.H. Gds., and to remain sec'd.; 2nd Lieut. H. J. Butler, Spec. Res.; Temp. 2nd Lieut. F. N. Insoll, Gen. List; 2nd Lieut. A. F. Barker, Hamps. R., and to be sec'd.; 2nd Lieut. (Temp. Lieut.) G. F. Knight, Devon. R., from a Flying Officer (Ob.), with seniority from April 29th; 2nd Lieut. (Temp. Lieut.) G. L. Colomb, Lond. R. (T.F.). Sept. 30th: 2nd Lieut. A. Gray, Arg. and Suth'd. Highrs. (T.F.); 2nd Lieut. J. C. Smith, E. Rid. of York. Yeo. (T.F.); 2nd Lieut. T. Thomson, Arg. and Suth'd. Highrs. (T.F.); 2nd Lieut. R. M. Charley, Spec. Res.; Temp. 2nd Lieut. F. W. Michell, Gen. List.

Flying Officers (Observers).—Sept. 29th: Lieut. H. E. Paquin, 22nd Canadian Inf. Bn.; Temp. Lieut. R. S. S. Brown, High. L.I., and to be transferred to Gen. List; 2nd Lieut. G. Chetwynd Stapylton, Yorks. L.A. (T.F.); 2nd Lieut. F. E. S. Phillips, Devon. R., Spec. Res., and to be sec'd. Oct. 1st: Temp. 2nd Lieut. V. Bayley, L'pool. R.; Temp. 2nd Lieut. H. E. Hervey, Gen. List.

Equipment Officers, 3rd Class.—Temp. 2nd Lieut. R. G. Meech, Gen. List; July 31st. 2nd Lieut. W. E. Bousfield, Spec. Res.; Aug. 4th. 2nd Lieut. A. W. Thompson, Spec. Res.; Aug. 7th. Aug. 8th: 2nd Lieut. (on prob.) T. McC. Yarwood, Spec. Res.; Temp. 2nd Lieut. A. G. Cox, Gen. List. Temp. 2nd Lieut. C. V. Thornton, Gen. List; Aug. 9th. 2nd Lieut. C. S. Hickie, Spec. Res.; Aug. 16th. Temp. 2nd Lieut. H. P. Bramwell, Arg. and Suth'd. Highrs., and to be transferred to Gen. List; Aug. 21st. Temp. Capt. W. E. Smith, A.S.C., and to be transferred to Gen. List; Aug. 24th. Sept. 18th: Temp. 2nd Lieut. (on prob.) W. J. R. Sheppard, Gen. List; Temp. 2nd Lieut. (on prob.) J. W. Maddock, Gen. List.

Memoranda.—Acting Sergt.-Major J. P. Angell, R.F.C., to be 2nd Lieut. for duty with R.F.C., Oct. 19th.

To be 2nd Lieuts. (on prob.) for duty with R.F.C.: Pte. E. L. Ravenscroft, from A.S.C., Oct. 2nd; F. D. Reynolds, Oct. 7th.

Supplementary to Regular Corps.—2nd Lieut. (on prob.) J. I. Jones resigns his commission; Oct. 19th.

London Gazette Supplement, October 19th.

Squadron Commander.—Capt. L. Jenkins, Dorset R.G.A. (T.F.), from a Flight-Commander, and to be Temp. Major whilst so employed; Sept. 20th.

Flying Officers.—2nd Lieut. R. A. Denne, Wilts. R., and to be sec'd.; July 30th. 2nd Lieut. (on prob.) J. Smyth, Spec. Res.; Sept. 22nd. Sept. 29th: Temp. Lieut. F. A. George, 16th Northd. Fus., and to be transferred to Gen. List; 2nd Lieut. (Temp. Lieut.) T. F. Burrill, Montgomeryshire Yeo. (T.F.); Temp. Lieut. L. S. Arbuthnot, A.S.C., and to be transferred to Gen. List; Temp. 2nd Lieut. (on prob.) R. B. Corfield, Gen. List; Temp. 2nd Lieut. (on prob.) E. V. Gibson, Gen. List; Temp. 2nd Lieut. (on prob.) A. H. Hodgson, Gen. List; 2nd Lieut. A. H. Whistler, Dorset R., and to be sec'd. Sept. 30th: Temp. Capt. C. N. Lowe, A.S.C., and to be transferred to Gen. List; 2nd Lieut. (Temp. Lieut.) A. H. C. Bruce, R.A., and to be sec'd.; Temp. 2nd Lieut. C. S. Fulton, R.Sc. Fus., and to be transferred to Gen. List; Temp. 2nd Lieut. A. W. Wood, W. York. R., and to be transferred to Gen. List.

Flying Officers (Observers).—2nd Lieut. E. Y. FitzGerald, Herts. Yeo. (T.F.); July 1st. July 15th: Lieut. H. D. Williams, Auckland Mtd. Rifles, N. Zealand Contingent; Temp. 2nd Lieut. G. C. Heseltine, E. York. R., and to be transferred to Gen. List; Temp. 2nd Lieut. F. E. Hillebrandt, Suff. R., and to be transferred to Gen. List; Temp. 2nd Lieut. (on prob.) H. E. Judge, Gen. List. 2nd Lieut. C. D. Thompson, H.A.C. (T.F.); July 24th. Aug. 1st: Temp. Lieut. S. F. Lydon, A.S.C., and to be transferred to Gen. List; 2nd Lieut. N. Clark, E. Lan. Brig., R.F.A. (T.F.); 2nd Lieut. E. T. H. Ellis, S. Mid. Divl. Sigl. Co., R.E. (T.F.); Temp. 2nd Lieut. (on prob.) F. G. Ibbett, Gen. List; 2nd Lieut. E. T. Shand, Otago Mtd. Rifles, N. Zealand Contingent. Aug. 15th: Temp. Capt. J. Leacroft, A.S.C., and to be transferred to Gen. List; Lieut. A. B. Jarvis, Middx. R. (T.F.); 2nd Lieut. S. S. Hume, 1st Co. of Lond. Yeo. (T.F.); 2nd Lieut. A. I. Campbell-Robertson, 18th Hrs., and to be sec'd. Aug. 25th: Lieut. A. G. Adams, 5th Bn. (Victoria), Australian Imperial Force; Lieut. D. W. Rutherford, 5th Regt. (Queensland), Australian Light Horse; Temp. 2nd Lieut. J. F. Alcock, Bedf. R., and to be transferred to Gen. List. Sept. 1st: Temp. Capt. (Temp. Major) H. R. Coningsby, Middx. R.; 2nd Lieut. (Temp. Capt.) J. Longton, A.S.C., and to be sec'd.; Temp. 2nd Lieut. H. G. G. Joynson, R.A., and to be transferred to Gen. List; Temp. 2nd Lieut. J. C. Watson, R. Fus., and to be transferred to Gen. List; Temp. 2nd Lieut. E. R. Cottier, R.A., and to be transferred to Gen. List. 2nd Lieut. D. N. Thomson, Glasgow Yeo. (T.F.); Sept. 3rd. Temp. 2nd Lieut. F. Libby, Gen. List; Sept. 26th.

Equipment Officers, 3rd Class.—2nd Lieut. H. F. Groves, Northd. Fus. (T.F.); Sept. 2nd. Sept. 11th: Temp. 2nd Lieut. (on prob.) V. W. Allen, Gen. List; Temp. 2nd Lieut. (on prob.) J. H. Dale, Gen. List. Temp. 2nd Lieut. A. C. Day, Gen. List; Sept. 29th. 2nd Lieut. W. J. King, N. Staff. R., and to be sec'd.; Sept. 30th.

Memoranda.—Acting Sergt.-Major J. Baxter, R.F.C., to be 2nd Lieut., for duty with R.F.C.; Oct. 12th. The under-mentioned Temp. 2nd Lieuts. to be Temp. Lieuts., whilst serving with R.F.C.:—Sept. 1st: H. L. Lascelles, A. Ellison, H. B. Denton, S. O. Barnsdale, R. F. Wills, A. M. Thom, R. B. Fricker, S. G. Kingsley, R. P. Willock, R. F. Sinclair, L. E. Eeman, H. Hamer, C. B. Cooke, W. J. Y. Guilfoyle, H. H. James. Cadet J. B. Crabb to be Temp. 2nd Lieut. (on prob.) for duty with R.F.C.; Oct. 7th.

Supplementary to Regular Corps.—The under-mentioned 2nd Lieuts. to be Lieuts.:—Sept. 1st: (Temp. Capt.) V. A. H. Robeson, (Temp. Capt.) J. P. C. Sewell, (Temp. Capt.) C. C. Miles, J. L. Williams, (Temp. Capt.) J. Latta, (Temp. Capt.) R. W. Nichol, W. C. Mortimer-Phelan, (Temp. Capt.) H. G. Salmond, (Temp. Capt.) M. Le Blanc-Smith, (Temp. Capt.) D. Joy, (Temp. Capt.) J. A. Crook, (Temp. Capt.) C. G. Tucker, (Temp. Capt.) F. J. H. Thayer, (Temp. Major) H. Lee, J. S. Castle. The under-mentioned to be 2nd Lieuts.: Aug. 17th: C. G. Nevatt, S. B. Browning, R. W. Anderson, W. K. Cannon; Aug. 27th. The under-mentioned 2nd Lieuts. (on prob.) are confirmed in their rank: J. Smyth, W. B. Kellogg, A. Edwards. The under-mentioned to be 2nd Lieuts. (on prob.): C. Deards; Sept. 9th. J. Ferguson; Oct. 9th.

London Gazette, October 20th.

Flight-Commanders.—From Flying Officers, and to be Temp. Cpts. whilst so employed: Temp. Lieut. C. E. I. C. Anne, Gen. List; Aug. 6th. Temp. 2nd Lieut. N. W. Webb, Gen. List; Oct. 4th. Temp. Lieut. J. R. Philpott; Oct. 7th.

Flying Officers.—Sept. 22nd: 2nd Lieut. (Temp. Capt.) H. C. Stroud, Northumbrian R.E. (T.F.); 2nd Lieut. L. R. Kerridge, Spec. Res. 2nd Lieut. A. Edwards, Spec. Res.; Oct. 1st. Oct. 2nd: 2nd Lieut. (Temp. Lieut.) H. G. Amis, York. R. (T.F.); Temp. 2nd Lieut. A. G. Cardwell, Gen. List; Temp. 2nd Lieut. L. F. Jones, Gen. List.

Equipment Officers, 3rd Class.—2nd Lieut. J. McCrae, Sea. Highrs.; Sept. 1st. Sept. 18th: 2nd Lieuts., Spec. Res.: R. W. Anderson, S. B. Browning, W. K. Cannon, C. G. Nevatt, F. W. Beard, C. B. Willcocks. Temp. 2nd Lieut. H. F. Bradley, Gen. List, from a Flying Officer; Oct. 4th.

Memoranda.—The under-mentioned to be Temp. 2nd Lieuts. (on prob.), for duty with R.F.C.:—Oct. 7th: Air-Mech. S. Sergt. A. W. Barnett, from A.S.C.; Pte. S. H. Child, from A.S.C.; Sapper A. Smellie, from Lond. Electrical Engrs. (T.F.); Cadet S. R. Winkworth.

General List.—The under-mentioned Cadets to be Temp. 2nd Lieuts. (on prob.), for duty with R.F.C.:—Sept. 26th: G. E. Brookes, J. K. Chatham, G. I. Fry, E. L. Humphrus, B. F. Parsons, E. R. Payne, N. V. Spear, G. S. Wood, A. H. Waterman, P. W. Wilcox, F. V. Way, C. P. Beadon, P. S. Bell, J. C. B. Brown, P. R. Cann, T. E. Carley, W. A. Clark, R. L. Curtis, P. C. Felts, E. A. R. Fowles, E. S. Guy, H. V. Headland, A. J. P. Hytch, A. Jackson, R. H. Latham, A. W. Little, H. P. Ledger, D. T. Leyshon, G. B. Mason, P. L. McGavin, V. L. Monsell, L. B. Moor, H. Morley, L. F. Duval, P. Kent, J. A. Pattern, A. R. Penny, K. W. Bransby, H. Briggs, T. W. Calvert, W. Casson, J. Frost, J. Handley, S. Hewett, E. P. Holloway, H. Horrocks, W. Hunt, N. H. Lahaye, H. P. Lale, G. S. Lee, P. I. Lewis, A. F. Sheppard, D. A. Strutt, F. Sumpter, F. Thompson, S. Thompson, S. S. Turnbull, J. R. Waller, J. L. Walton, A. E. Wear, C. L. Whitburn, F. C. Wild, R. Wilson, T. A. Langford-Sainsbury, H. A. Payne, J. H. Walker, A. H. Craig, C. A. Farquharson, M. B. Frew, J. G. Blane, D. S. Gray, N. V. Harrison, J. Henry, J. Johnstone, P. E. Kerr, T. H. MacDonald, T. MacMillan, N. McLeod, N. MacMillan, F. W. Maclean, A. R. Martin, W. C. McMurray, W. Turnbull, P. R. Adams, C. S. Atkinson, F. F. Babbage, P. H. Baker, T. H. Bowen, S. R. Burton, A. Critchley, R. Dutton, F. Fowler, R. Grant, B. A. Gunner, J. E. B. Hesketh, T. J. Hudson, L. M. Hughes, C. A. Hyde, S. Leith, W. Moulding, N. R. Muir, J. L. Murray, H. F. Nicholls, D. L. Nutt, L. A. Rivers, P. Robinson, B. Strachan, V. S. Taylor, S. Thompson, J. Toulmin, J. A. Westerman, L. A. Weston, W. Allan, F. V. Bryant, F. N. Clark, W. T. Edwards, F. L. Garner, E. R. Haines, J. Hancock, O. C. Pearson, L. F. Clark, B. E. Carter, F. Doherty, J. G. H. Frew, D. P. Glazer, A. Hartley, G. S. King, C. W. Lewis, R. F. Mullins, A. G. Platt, D. J. Reason, E. G. Roberts, T. Robinson, B. F. Sandy, S. E. M. Simpson, P. Wilson, R. D. Boyd, R. de R. Brett, H. P. Connor, W. Dawson, J. A. French, T. M. McFerran, M. J. McGarry, J. J. Malone, E. M. Meredith, E. T. Molyneux, T. M. O'Neill, J. J. Tivenan, D. P. Wilson, S. Pickford.

Supplementary to Regular Corps.—The undermentioned to be 2nd Lieuts. (on prob.): J. Paradise; Sept. 10th. C. E. Bagram; Oct. 7th.

London Gazette Supplement, October 21st.

Flight-Commander.—Lieut. P. C. Sherran, 40th (Res.) Can. Inf. Bn., from a Flying Officer, and to be Temp. Capt. whilst so employed; Oct. 6th.

Flying Officers.—Sept. 29th: 2nd Lieut. (Temp. Lieut.) H. A. R. Boustead, Middx. R. (T.F.); 2nd Lieut. H. J. Brewster, Middx. R., and to be sec'd.; 2nd Lieut. W. B. Kellogg, Spec. Res. 2nd Lieut. C. L. Bullock, Rif. Brig., Spec. Res., from a Flying Officer (Ob.), with seniority from March 1st. Sept. 30th: Capt. R. Oxspring, Yorks. L.I., Spec. Res., from a Flying Officer (Ob.), with seniority from May 31st; Lieut. E. J. Y. Grevelink, W. Rid. R., and to be sec'd. Temp. 2nd Lieut. M. W. Dickens, Gen. List; Oct. 2nd. Oct. 4th: Capt. J. E. Mackay, 95th Canadian Inf. Bn.; Temp. 2nd Lieut. A. A. Patterson, Bord. R., and to be transferred to the Gen. List; 2nd Lieut. R. H. Lemon, R. W. Surr. R. (T.F.).

Flying Officer (Observer).—The initials of Temp. 2nd Lieut. J. B. R. Langley, Gen. List, are as now described, and not as in the Gazette of Sept. 22nd, 1916.

Memoranda.—Lieut. W. Halliwell, T.F. Res., Gen. List, to be Temp. Lieut., Gen. List, for duty with R.F.C.; Sept. 22nd. Lieut. J. H. Cock, N. Zealand Expeditionary Force, to be Temp. 2nd Lieut. (on prob.), for duty with R.F.C.; Sept. 25th.

Supplementary to Regular Corps.—The under-mentioned 2nd Lieuts. (on prob.) are confirmed in their rank: H. S. Lees-Smith, H. Whitehead, A. E. Squire, T. Woodman. The under-mentioned to be 2nd Lieuts. (on prob.): F. C. R. Johnson; Sept. 7th. C. C. Cruttenden; Oct. 7th.

London Gazette Supplement, October 23rd.

The under-mentioned Warrant Officers, N.C.Os. and men to be Temp. 2nd Lieuts. (on prob.), for duty with the R.F.C.: Petty Officer A. G. Tremain, from R.N.A.S.; Sept. 8th. Pte. C. P. R. Holdcroft, from Headquarters Staff, Can. Div.; Sept. 10th. Pte. A. N. Martyn, from Lond. R. (T.F.); Sept. 11th. Corpl. W. J. Gray, from Can. Corps, Cav. Regt.; Sept. 12th. Sept. 15th: Staff-Sergt.-Major A. H. Cabeldu, from A.S.C.; L.-Sergt. H. B. Mann, from 10th R. Fus.; Gnr. J. Michie, from M.G.C.; Gnr. G. Maddock, from R. Can. H.A.; Pte. J. E. Le Gallais, from Can. A.S.C.; Pte. H. R. Hare, from Can. A.S.C.; Pte. P. L. Goudie, from Can. A.S.C.; Pte. G. H. Glendenning, from M.G.C. Sept. 19th: Corpl. A. W. Clarke, from R.E.; Corpl. C. T. Keble, from R.F.C.; 1st Class Air-Mech. J. Watson, from R.F.C.; 1st Class Air-Mech. C. H. Mendham, from R.F.C.; 2nd Class Air-Mech. W. W. Fitzgerald, from R.F.C. Sept. 21st: Acting Sergt. H. C. Barr, from Can. A.S.C.; Pte. R. Davis, from Can. Corps, Cav. Regt. Pte. N. M. H. Vernham, from A.S.C.; Sept. 22nd. Sept. 24th: Acting Corpl. C. St. C. Acheson, from Can. A.S.C.; 2nd Class Air-Mech. J. G. Beckham, from R.F.C.; Pte. V. C. Manuel, from Can. A.S.C.

Flying Officers.—Sept. 18th: 2nd Lieut. (Temp. Lieut.) E. C. Lansdale, W. Lan. A.S.C. (T.F.); 2nd Lieut. (on prob.) A. R. M. Scrase-Dickens, K.R. Rif. C., Spec. Res., and to be secd. Oct. 4th: 2nd Lieut. W. W. Sawden, E. Rid. R.G.A. (T.F.); 2nd Lieut. F. R. Hudson, Spec. Res. Temp. 2nd Lieut. R. L. Dingley, 14th Worc. R., and to be transferred to Gen. List; Oct. 7th.

Memoranda.—To be Temp. 2nd Lieuts. for duty with

R.F.C.:—Sept. 10th: Coy.-Sergt.-Major J. A. Payne, Regtl. Sergt.-Major F. H. Hawksford. To be Temp. 2nd Lieuts. (on prob.): Pte. G. K. Cathles, from Lond. R. (T.F.), for duty with R.F.C.; Sept. 9th.

Supplementary to Regular Corps.—The surname of 2nd Lieut. (on prob.) J. D. Coales is as now described, and not as in the *Gazette* of Sept. 6th. The under-mentioned 2nd Lieuts. (on prob.) are confirmed in their rank: J. D. Coales, C. Kennard, J. J. Bartlett, C. W. Barnsley, W. F. J. Matthews, H. I. Allen, F. H. O'Beirne, A. L. Challis, E. M. Leete, F. R. Hudson. J. D. Campion to be 2nd Lieut; Sept. 9th. The under-mentioned to be 2nd Lieuts. (on prob.):—Aug. 24th: F. Ryder, J. Page, J. Farquharson, W. T. Davis, H. Hoad, G. Barfoot-Saunt; Aug. 27th. E. D. C. Herne; Oct. 1st. Oct. 6th: S. C. Foster, E. B. Denison, R. R. Riggs, W. Wells, J. C. Noble, J. H. Muir, D. W. McGregor, C. Knowles, R. C. Steele.

Central Flying School. *London Gazette, October 17th.*

Instructors.—Temp. Lieut. (Temp. Capt.) J. C. Russell, R.E., a Flight-Commander; July 1st. 2nd Lieut. (Temp. Capt.) S. G. Hodges, Wilts. R., a Flight-Commander; Aug. 1st.

School of Aerial Gunnery.

London Gazette Supplement, October 18th.

Commandant (graded as a Wing Commander).—Lieut. (Temp. Major) L. A. Strange, Dorset R., from a Squadron Commander, and to be Temp. Lieut.-Col. whilst so employed; Sept. 13th.

Chief Instructor (graded as a Park Commander).—Lieut. (Temp. Capt.) H. E. Chaney, Lan. Fus., from an Equipment Officer, and to be Temp. Major whilst so employed; Sept. 13th.

Instructors (graded as Equipment Officers, 1st Class).—From Asst. Equipment Officers, and to be Temp. Cpts. whilst so employed:—Sept. 13th: Temp. 2nd Lieut. (Temp. Lieut.) F. G. Wilson, Gen. List; Temp. 2nd Lieut. S. W. Cooper, Gen. List.

Staff Officer, 2nd Class (graded for Pay as a Brigade Major).—Capt. K. B. Harbord, R.A., from a Flying Officer; Sept. 13th.

Adjutant.—Temp. Qmr. and Hon. Lieut. H. R. Howarth, Gen. List, and to be Temp. Capt. whilst so employed; 13th Sept.



A snapshot of Lieutenant Tempest, R.F.C., who was recently awarded the D.S.O. in connection with bringing down Zeppelin raiders.

FURTHER REWARDS FOR R.F.C.

In a supplement to the *London Gazette*, issued on October 20th, it was announced that H.M. the King has been graciously pleased to approve of the appointments of the under-mentioned officers to be Companions of the Distinguished Service Order, in recognition of their gallantry and devotion to duty in the field:—

Capt. WILLIAM D. S. SANDAY, M.C., R.F.C.

For conspicuous gallantry and skill. He has led over thirty-five patrols with great gallantry. On one occasion a machine of his formation was attacked, but he charged and brought down the enemy machine in flames. He has destroyed at least four enemy machines.

Lieut. (Temp. Capt.) ALAN M. WILKINSON, Hamps. R. and R.F.C.

For conspicuous gallantry and skill. He has shown great dash in attacking enemy machines, and up to the end of August he had accounted for five. On one occasion, while fighting a hostile machine, he was attacked from behind, but outmanoeuvred the enemy and shot him down. Finally he got back, his machine much damaged by machine-gun fire.

H.M. the King has also been graciously pleased to confer the Military Cross on the under-mentioned officers in recognition of their gallantry and devotion to duty in the field:—

Lieut. (Temp. Capt.) LESLIE P. AIZLEWOOD, York. and Lanc. R. and R.F.C.

For conspicuous gallantry and skill. Seeing five hostile machines, he manoeuvred to get between them and their lines, then, diving on one of them, he reserved his fire till he was only 20 yards off. The hostile machine fell out of control, but he was so close to it that he collided with it, breaking his propeller and damaging his machine. Though it was barely controllable, he managed to get back to our lines.

Second Lieut. (Temp. Capt.) JOHN O. ANDREWS, R. Scots and R.F.C.

For conspicuous gallantry and skill. He is a fine leader of offensive patrols, and has himself shot down four enemy machines. On one occasion he got within 25 yards of an enemy machine under heavy fire and brought it down a wreck.

Second Lieut. (Temp. Lieut.) ALAN D. BELL-IRVING, Gord. Highrs., Spec. Res., and R.F.C.

For gallantry and skill in attacking a hostile balloon at 1,000 ft. under heavy fire and bringing it down in flames. On a previous occasion he brought down a hostile machine.

Temp. Second Lieut. (Temp. Capt.) KEITH R. BINNING, Gen. List and R.F.C.

For conspicuous gallantry and skill, notably when he made two contact patrol flights over the enemy's trenches at a height of under 1,000 ft. His machine was repeatedly hit by machine-gun and rifle fire, but he rendered exact reports of the position of our own and the enemy's troops. On another occasion he did similar fine work.

Second Lieut. ALAN J. BOTT, R.G.A., Spec. Res. (attd. R.F.C.).

For conspicuous gallantry and skill. As observer he has been in many fights, and furnished many good reports. On one occasion, when his pilot was gliding back to our lines after his engine had been hit and stopped, he drove off an attacking aeroplane and put out with his hands a fire started by anti-aircraft guns. On another occasion, after driving down one hostile aeroplane, he fired at another, which dived and collided with a third. This last one fell vertically.

Second Lieut. WALTER H. C. BUNTINE, Notts. and Derby R. and R.F.C.

For conspicuous gallantry and skill. As escort to a bombing raid he attacked several hostile machines, one of which fell to the ground nose first. Later he was attacked by three enemy machines, his own machine being damaged and himself severely wounded. With great skill he managed to land in our lines, though most of his propeller was shot away and his machine otherwise much damaged.

Second Lieut. CLIFFORD W. BUSK, Suff. R. and R.F.C.

For conspicuous gallantry and skill. He has taken part in many reconnaissances and fights, and on one occasion shot down an enemy aeroplane. On another occasion, when his pilot's control wires were cut and the machine went into a spin, he helped to restore stability by leaning far out on the upper side, and remained in this position till the machine got home.

Second Lieut. (Temp. Capt.) JAMES L. CHALMERS, R.F.C., Spec. Res.

For conspicuous gallantry and skill. He has done much fine counter-battery work, often flying very low under heavy fire from the ground. On one occasion one of our shells broke the main spar of his machine. On another, in one flight, he dealt effectively with four enemy batteries.

Temp. Second Lieut. CHARLES T. CLEAVER, Gen. List.

For conspicuous gallantry and ability in attacking hostile dash in contact patrol work at very low altitudes. On one occasion he obtained good information of a trench flying at 500 ft. under heavy fire from rifles and machine guns.

Temp. Second Lieut. LESLIE F. FORBES, Gen. List and R.F.C.

For conspicuous gallantry and skill in attacking hostile machines and bombing railway lines, especially on one occasion, when he descended to 350 ft. in order to accomplish his object.

Second Lieut. EUAN J. L. W. GILCHRIST, Lrs. and R.F.C.

For conspicuous gallantry and skill when he attacked a hostile balloon and brought it down in flames, although under heavy fire and attacked by six hostile machines.

Second Lieut. (Temp. Capt.) IAN H. D. HENDERSON, Arg. and Suth'd. Highrs.

For conspicuous gallantry and skill on several occasions. He drove down a machine out of control, and two days later dispersed six enemy machines which were attacking his formation. A few days later again he brought down an enemy biplane, the observer being apparently killed. A week after this he attacked and drove down another machine which had wounded his leader. He has also carried out several excellent contact patrols and attacked retiring artillery and a kite balloon.

Second Lieut. GEOFFREY T. R. HILL, R.F.C., Spec. Res.

For conspicuous gallantry and skill. He attacked an enemy kite balloon under very difficult circumstances, and continued firing until he was within 20 ft. of it. He was then only 1,000 ft. from the ground, and under heavy fire from anti-aircraft and machine guns, but on looking round he saw the burning wreckage of the balloon on the ground.

† Capt. HENRY J. F. HUNTER, Rif. Brig. and R.F.C.

For conspicuous gallantry and skill. He has done fine work for the artillery, and has accounted for many enemy guns. On one occasion, when a heavy storm drove all other machines back to their aerodromes, and the enemy guns took the opportunity to become active, he remained up and did fine work.

Second Lieut. (Temp. Capt.) CHARLES C. MILES, R.F.C., Spec. Res.

For conspicuous gallantry and skill. He has shown great dash in contact patrol work. On one occasion he reconnoitred an enemy trench at 500-ft. altitude, under heavy fire, which severely damaged his machine. Five days later, while working at 600 ft., he was severely wounded.

Temp. Capt. KENNETH N. PEARSON, Gen. List and R.F.C.

For conspicuous gallantry and skill. With one other pilot he attacked 10 hostile aeroplanes. The other pilot had his controls cut and had to return, but Capt. Pearson fought on till all the enemy aeroplanes were dispersed. On another occasion he bombed trains from a low altitude. He has done other fine work.

Second Lieut. FENTON E. S. PHILLIPS, Devon. R., Spec. Res. and R.F.C.

For conspicuous gallantry and skill. He has done fine contact patrol work. On one occasion he came down to a low altitude while making a report, and his machine was much damaged by rifle and machine-gun fire, but he carried on, and successfully put our artillery on to the enemy, who were massing for a counter-attack.

Temp. Lieut. JOHN R. PHILPOTT, Gen. List and R.F.C.

For conspicuous gallantry and skill in descending to about 300 ft. under heavy fire of all descriptions in order to bomb a train. Finding that Captain Tyson had wrecked the train, he dropped his bombs on a station, and then assisted him to beat off hostile machines. He then, with Captain Tyson, attacked a machine which was endeavouring to leave the ground. He has previously displayed great gallantry.

Temp. Lieut. DAVID H. SCOTT, Army Cyclist C. and R.F.C. For conspicuous gallantry and skill. With Second Lieut. Turk as pilot, he attacked seven hostile machines flying in formation, and brought down one as a wreck.

Second Lieut. BERNARD V. S. SMITH, R. War. R. and R.F.C. For conspicuous gallantry and determination on several occasions when dropping bombs from a low altitude on points behind the enemy's line.

Second Lieut. HERBERT H. TURK, R.F.C., Spec. Res. For conspicuous gallantry and skill. With Lieut. Scott as observer he attacked seven hostile machines flying in formation. One was brought down as a wreck. When turning to meet another machine his rudder controls were shot away, and his machine got into a spinning nose-dive. After falling 5,000 ft. he partially regained control, and, though his machine kept on turning, he managed to land safely. The machine was badly damaged, but, thanks to his skill, neither he nor his observer were hurt.

Temp. Capt. ERIC J. TYSON, Gen. List and R.F.C. For conspicuous gallantry and skill during bombing raids. Descending to about 300 ft. under heavy fire of all descriptions, he succeeded in wrecking a train. Whilst doing this he was attacked by other hostile machines, which he beat off with the assistance of Lieut. Philpott, in another machine. Although wounded and with engine severely damaged, he attacked with Lieut. Philpott a group of men who were endeavouring to start a hostile machine, and scattered them in all directions. His machine was riddled with bullets.

Temp. Capt. (Flight-Commander) KENNETH R. VAN DER SPUY, R.F.C.

For conspicuous gallantry and skill. He flew for 4½ hours under dangerous climatic conditions, and brought back information of great value.

The under-mentioned officers have been awarded a bar to their Military Cross for subsequent acts of conspicuous gallantry:—

Second Lieut. SIDNEY E. COWAN, M.C., R.F.C., Spec. Res.

For conspicuous gallantry and skill. He has done fine work in aerial combats, and has shot down four enemy machines.

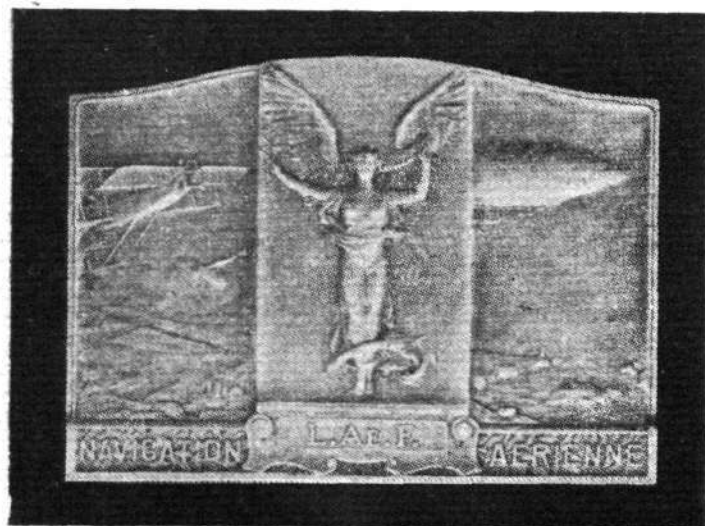
Capt. ALFRED G. MOORE, M.C., Manch. R., Spec. Res. and R.F.C.

For conspicuous gallantry and skill. While fighting he had several wires shot away and his main spar damaged. His machine went into 2 spinning nose-dive. Nevertheless he finally managed to get some sort of control, and landed safely in an aerodrome.



A Zeppelin Memorial.

By way of commemorating the descent of a Zeppelin in flames, the inhabitants of an Essex village near where it fell have decided to erect a tablet in the parish church, and are asking the authorities to present the necessary aluminium for making the tablet.



Air Work in Mesopotamia.

In the list of officers, and non-commissioned officers mentioned in the despatch (*London Gazette Supplement*, October 19th) of Lieut.-General Sir Percy Lake for their meritorious services in the course of the operations in Mesopotamia from January 19th to April 30th, including the efforts in the further attempt to relieve Kut, are the following:—

Staff and Headquarters.—Capt. (Temp. Major) P. W. L. BROKE-SMITH, R.F.C.

Royal Flying Corps.

Lieut. R. E. CUFF, N. Lanc. R., Spec. Res.; Lieut. T. M. DICKINSON, 16th Cav.; Capt. J. W. THOMSON-GLOVER, 35th Sikhs; Brevet-Major S. D. MASSY, D.S.O., 29th Punjabis; Second Lieut. I. R. MCCRINDLE, Spec. Res.; Lieut. (Temp. Capt.) J. O. C. ORTON, Norfolk R.; Capt. H. PETRE, Australian F.C.; Second Lieut. (Temp. Capt.) W. R. WILLS, Ind. Army Res. of Off.

No. 43 Flight-Sergt. G. J. W. MACKINALTY, No. 4474 Flight-Sergt. R. J. TOMLINSON, No. 4477 Flight-Sergt. A. WEBB.

In the list of officers recommended by Major-General Townshend for distinguished service during the defence of Kut-el-Amara is the following:—

Royal Flying Corps.—Flight-Commander S. C. WINFIELD SMITH, Capt. E. Surr. R., Spec. Res.

In the same supplement it was announced that H.M. the King had been graciously pleased to approve of the under-mentioned reward for distinguished service in the field, with effect from June 3rd, 1916, inclusive:—

D.S.O.

Capt. and Brevet-Major H. L. REILLY, Punjabis and R.F.C.

Medals for the R.F.C.

In a supplement to the *London Gazette* issued on October 18th, it was announced that H.M. the King has been pleased to award the Meritorious Service Medal to the following in recognition of valuable services rendered during the present war:—

Flight-Sergt. R. G. FOSTER, R.F.C.

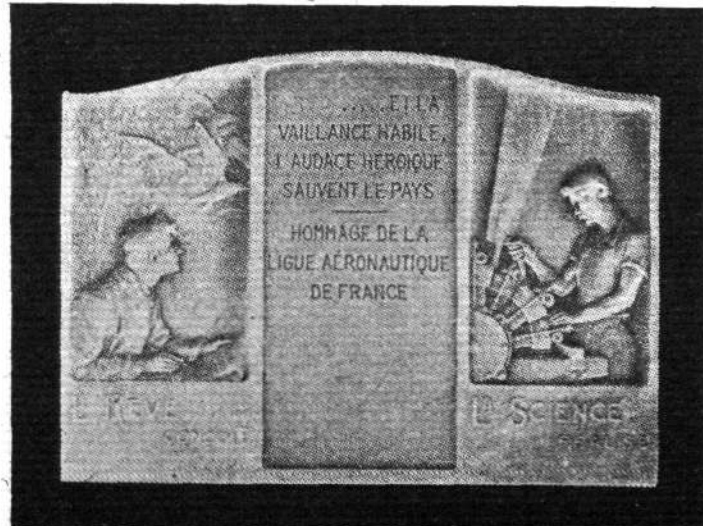
In a supplement to the *London Gazette* issued on October 22nd, it was announced that H.M. the King has been graciously pleased to award the Military Medal for bravery in the field to the following:—

2173 Sergt. G. J. MORTON, R.F.C.



A Dispute Settled.

At a conference held on October 20th at the offices of the Labour Adviser, a settlement was reached in the dispute affecting the wages of woodworkers in the aeroplane industry, and it was decided that the men should receive war bonuses of 2s. to 4s. a week according to their wages.



The silver plaque, which measures 72 by 100 mm., offered to French bombers by the League Aé. France. The obverse and reverse.

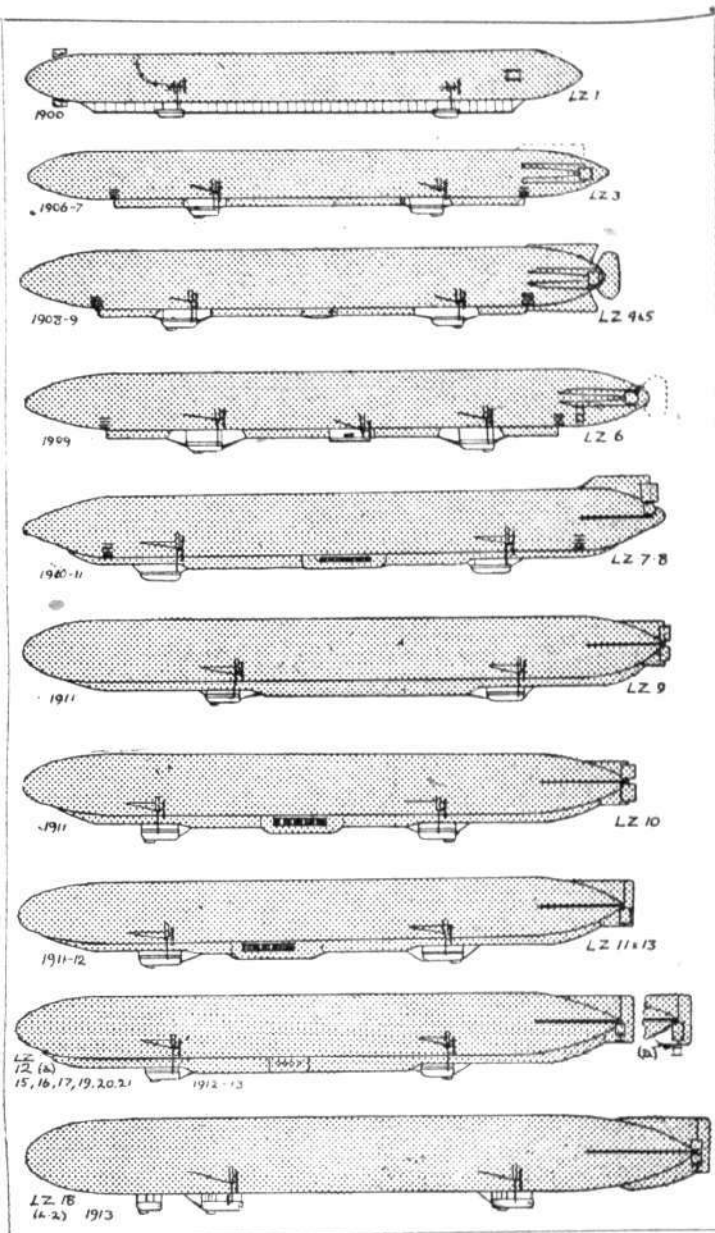
THE EVOLUTION OF THE GERMAN AIRSHIP FLEET.

By way of introduction to our description of LZ33, which follows, it is not inappropriate to give once again the briefest of historical *résumés* of the evolution of the Zeppelin. An absolutely complete history would fill far more space than we have at our disposal in this issue, but the following brief pedigree of the various models turned out from the first up to the year 1914, together with the accompanying diagrams and illustrations, should give a very fair idea as to the progress made by this type of aircraft. It should be mentioned, however, that this progress has already been chronicled, not only in "FLIGHT," from Vol. I, in 1908, but in the pages of its parent, the "Auto.," for many years before.

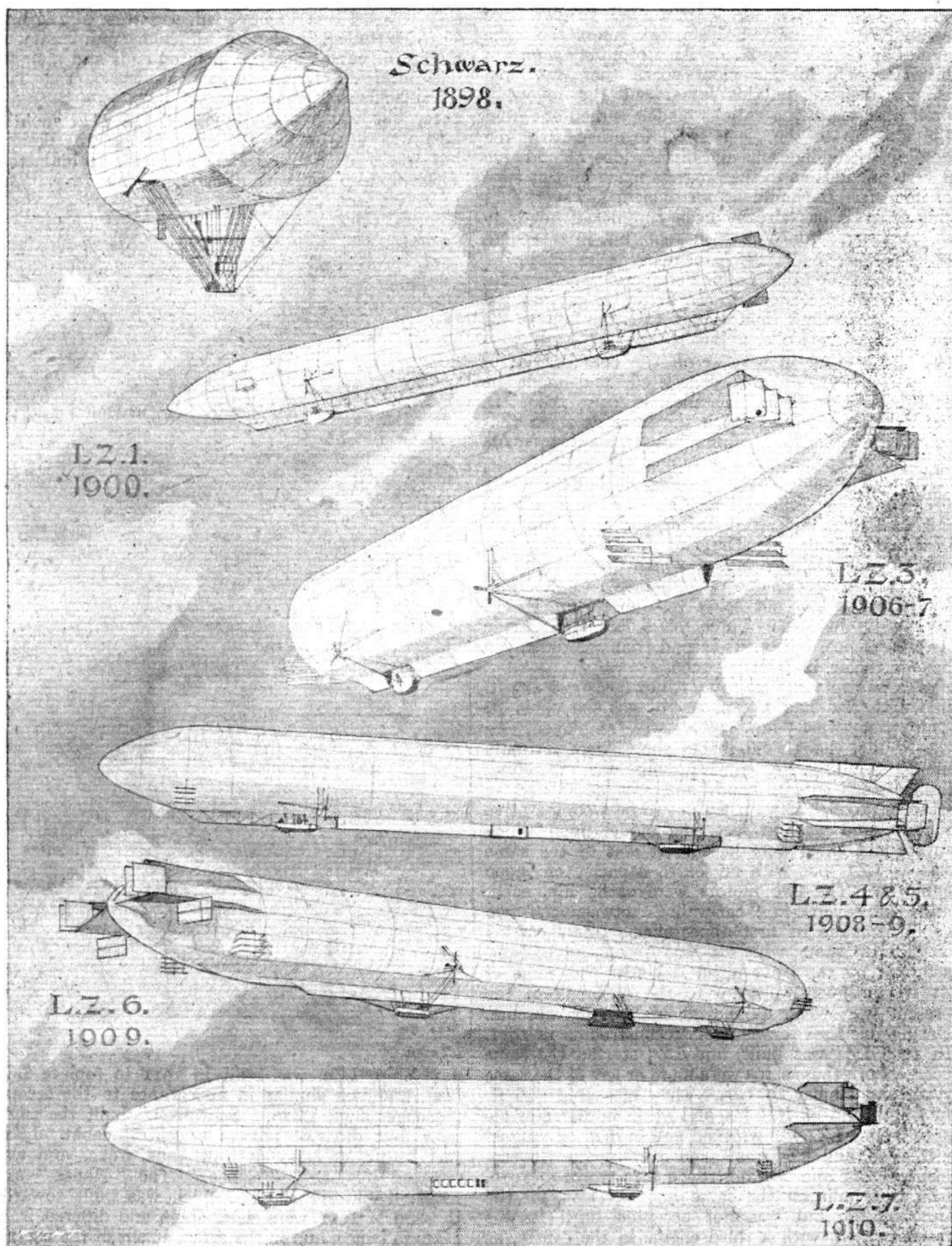
It was in 1893 that Count Ferdinand von Zeppelin, inspired by the efforts of D. Schwarz, got out the designs of his first rigid airship with the help of his chief engineer, Kober; but it was not until 1898 that he started in earnest on the construction of LZ1. This airship was completed, and made its first trials over Lake Constance, in July, 1900. In general design it was much the same as those that followed, viz., a long aluminium framework, made up into compartments containing the gas-balloons, having an outside covering of fabric and two cars or gondolas suspended beneath it. It was 420 ft. long and 38 ft. 6 ins. in diameter, and had a capacity of 400,000 cubic ft. The two gondolas each had one 16 h.p. Daimler motor, which drove a pair of propellers, mounted one on either side of the ship. The trials of LZ1 not being very successful, it was broken up in 1902. Three years later LZ2 made its appearance, but on its second trial was destroyed beyond repair, in January, 1906.

LZ2 was very similar to LZ1, but measured 413 ft. in length and had a capacity of 367,500 cubic ft. This time two 85 h.p. motors were employed, and the results, though cut rather short, were certainly more promising. A third airship was, therefore, immediately got in hand, and was completed in October, 1906. LZ3 turned out to be a comparative success, and was, in fact, the model upon which subsequent ships were based. It was of the same size as LZ1, but with an extra capacity of 4,000 cubic ft. The two motors were of 85 h.p. each, and the covered-in "cat-walk" between the two gondolas made its first appearance. LZ3 "carried on" until 1908, when it was reconstructed and acquired by the Government. Under the name of Z1 it continued work up to the outbreak of the present war, when its movements became obscure. During this time it was again reconstructed in 1911. In 1908 LZ4 was built, and LZ5 started the same year. Both these ships were more or less of the same type, and similar to LZ3. They measured 446 ft. in length and 38 ft. 6 ins. and 43 ft. in diameter respectively. LZ4 was wrecked and burned on August 5th, 1908, and LZ5 was taken over by the Government as Z11 and was destroyed in a storm in 1910. LZ6 was built on the same lines as LZ5, for the Government, but was not accepted until it was reconstructed, with a third engine in the centre, as shown in the illustrations, in 1909. It was destroyed by fire in 1910. In 1910 the first passenger Zeppelin was built, the LZ7, "Deutschland," measuring 148 ft. by 14 ft., and having a central cabin in the

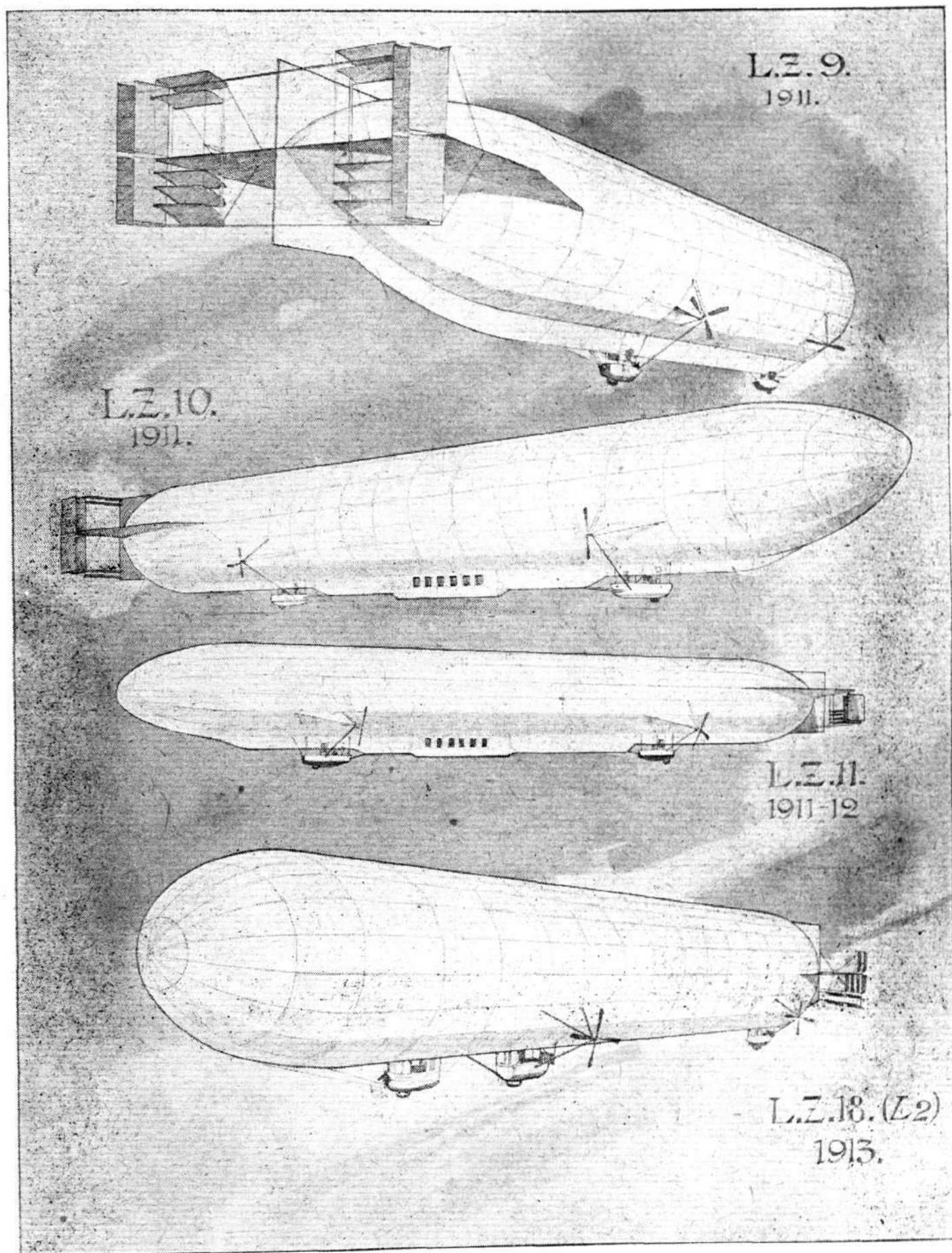
"cat-walk." Besides the latter innovation, this ship was the first to have three motors, of 120 h.p. each, installed, and also differed from previous models in having sharper, pointed ends and a single horizontal stabilising surface at the stern. The "Deutschland" was destroyed by a gale in June, 1910, but was replaced by LZ8 the next month. LZ8 was very much the same in general design, but was 7 ft. longer and 3 ft. larger in diameter. This ship also met with disaster, in May, 1911. The



next ship, LZ9, was built in 1911 to replace LZ5 (Z2), and was similar in appearance to the second passenger ship, LZ10, "Schwaben," built the same year, but did not possess a central cabin. LZ10 was burnt at Düsseldorf in June, 1912, and was replaced by LZ13, "Hansa." The "Hansa," and LZ11, "Viktoria Luise," which was built towards the end of 1911, were sister ships, and differed from LZ10 in length and in the arrangement of the central cabin (which was more forward) and the tail planes. Then followed a set of ships, LZ12, 15, 16, 17, 19, 20 and 21, during 1912 and 1913, which were all practically of the same type, and with the exception



THE EVOLUTION OF THE ZEPPELIN AIRSHIP IN PICTURES.—Part I, from 1900 to 1910. The Schwarz Airship at the top has been included as the source of inspiration to Count Zeppelin.

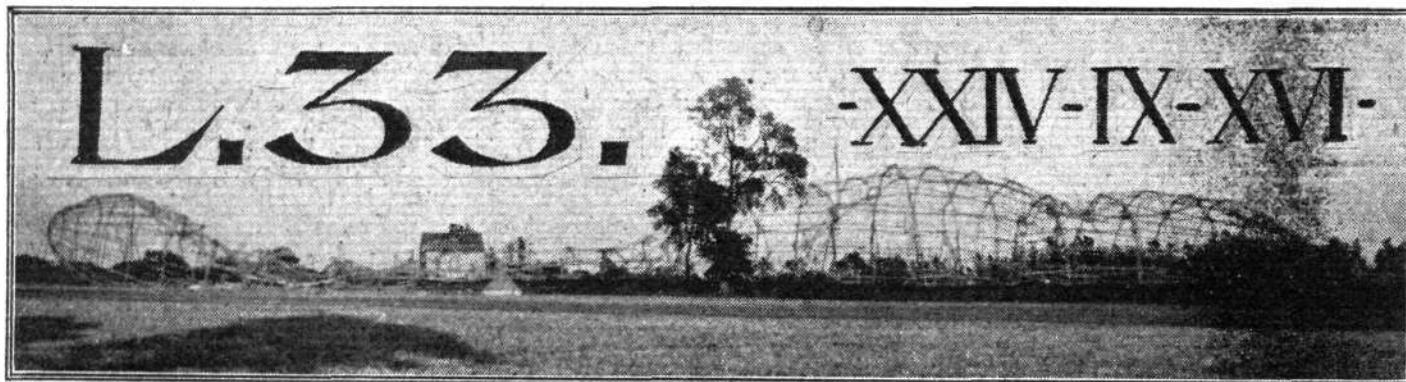


THE EVOLUTION OF THE ZEPPELIN AIRSHIP IN PICTURES.—Part II, from 1910 to the outbreak of war.

of LZ17, "Sachsen," were taken by the Government as Z3, the "Ersatz," 4, 1, 5, 6 and 7 respectively.

There remain but three other types to record, LZ14 (L1), the first naval ship, LZ18 and LZ24, two other naval ships. The former and latter were similar to, but larger than, the "Hansa" type, whilst the LZ18

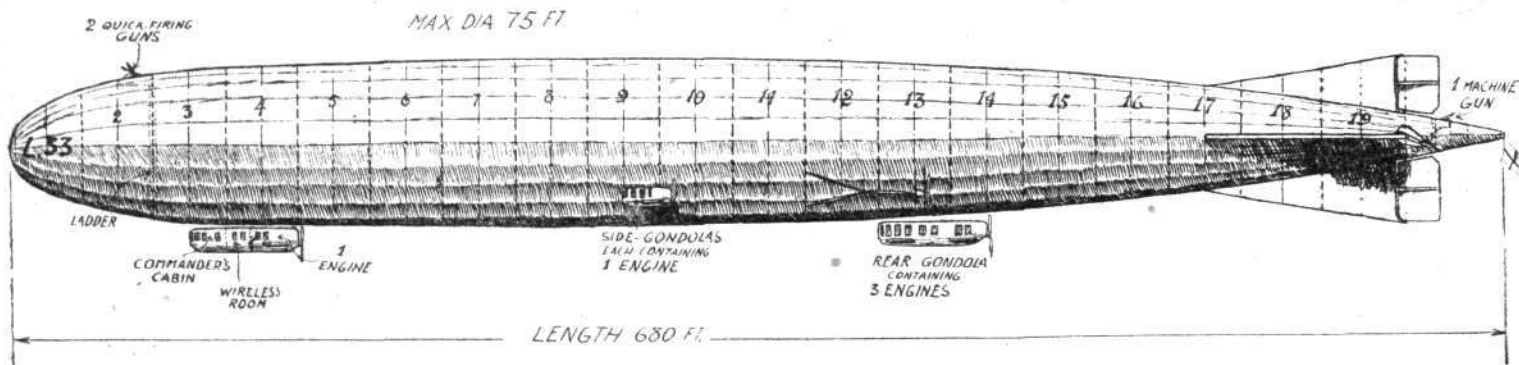
was peculiar in the absence of the usual "cat-walk." It was by far the largest ship yet built, measuring 518 ft. in length and 54 ft. in diameter. It was destroyed by fire in October, 1913. With the war, further record is in abeyance, but now, through just retribution, we can deal with



It is through the courtesy of the authorities we are able this week to place before our readers illustrations and notes dealing with the Zeppelin airship "L. 33," which, following a raid, was forced, after having attempted to make the return journey, to turn about and steer inland again, there to finally come to grief, as was recorded at the time. How the little cottage seen in some of our photographs escaped damage from fire must for ever remain a mystery (the weatherboards of the former have not even had their paint scorched), the distance from the nearest portion of the wreckage to the walls of the cottage being only a

number of bays in the main hull, which would certainly lead one to guess at a greater number than 19. It appears probable, however, that the rear cells did not contain any ballonnets, the extreme stern forming merely a tailpiece to finish the streamline shape. There were four cars, one near the nose, two about half way, slung from the sides of the main hull, and one some distance further back.

Coming now to the detail construction, it appears better, in order to facilitate reference, to deal with the various items under separate headings. Beginning with the main hull,



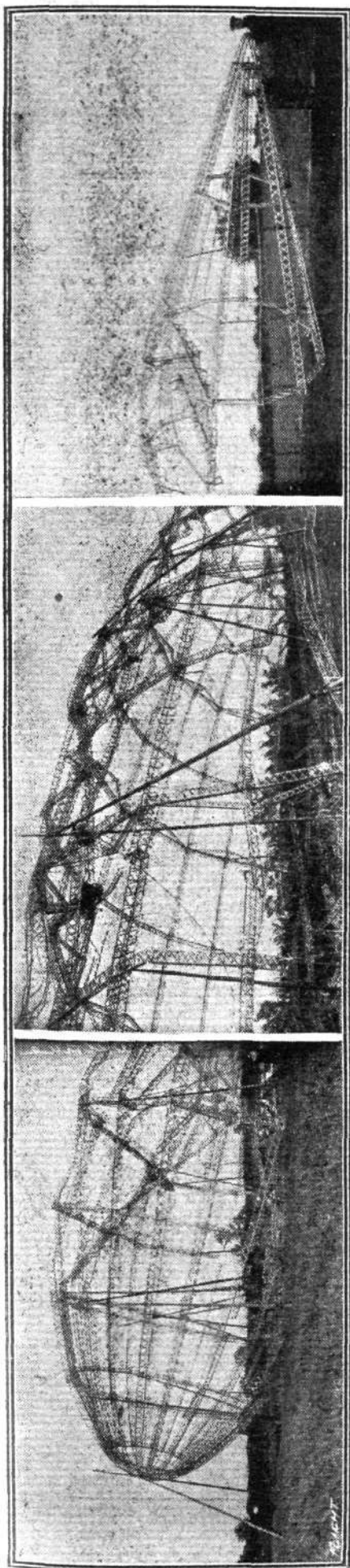
A "RECONSTRUCTION" OF "L. 33."—Although the above drawing does not purport to be an exact scale drawing in detail, it may, generally speaking, be taken to be fairly accurate in proportions. The first thing that impresses one is the striking similarity, in shape and in the distribution of the gondolas, to the Schütte-Lanz airships. Aerodynamically "L. 33" would appear to approach very closely to that type of airship, while retaining the typical Zeppelin construction.

few feet. Although having now remained over a month where she landed, the wreckage of the airship has sagged very little, thanks to the unceasing vigilance of the R.N.A.S., who are constantly at work propping up any portion that appears to be in danger of collapsing, and keeping everything as far as possible in its original shape, until such time as the experts have finished their examination.

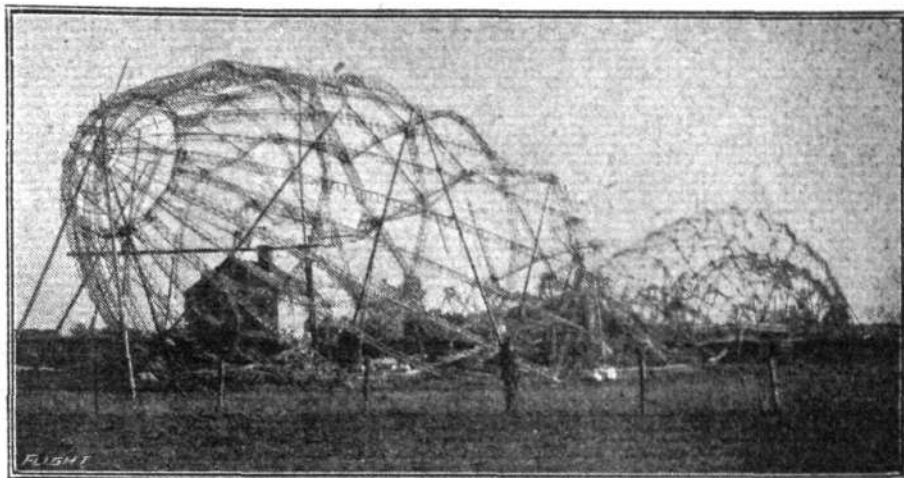
Although the middle portion of the wreck is somewhat badly battered, it has been possible to ascertain with tolerable accuracy the chief dimensions of the airship. Her length overall appears to have been in the neighbourhood of 680 ft., and the maximum diameter about 75 ft. As far as is possible to judge the hydrogen has been contained in 19 ballonnets, the number given in some papers as being 24 being incorrect, and probably arrived at after counting the

The Longitudinal Girders

will be dealt with first. These, as, indeed, the whole framework of the airship, are of the lattice girder type, and are all triangular in section. Generally speaking they are in two sizes—the larger measuring across the two sides of the triangle about 15 ins., while the base of the triangle is about 10½ ins. In order probably to standardise as far as possible, it appears that the smaller type of girder has been so proportioned that its sides are the same dimensions as the base of the larger girder, its base being about 8 ins. Each girder is built up of three corner rails—18-gauge in the larger girder and 20-gauge in the smaller—connected by the riveted crosses illustrated in our description of the relics at the H.A.C. These crosses are 23-gauge in the smaller girder, and about 22-gauge in the larger. There are 13 of the larger



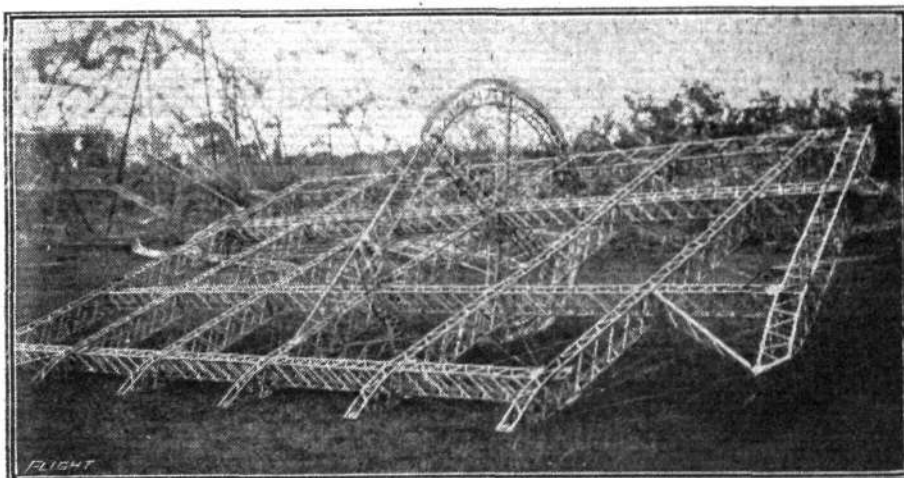
"L. 33" WRECKAGE.—Views of the aluminum framework as now lying on the ground. On the left is seen the side of the nose of the airship, in the center is a portion of the main framework (in this, near the top, can be seen some of the gas valves of the ballonets), and on the right is the framework of the extreme tail of the airship. In this photo., in the top left-hand corner, can be seen the platform on which the rear top gun is mounted.



General view of the wreck of "L. 33," looking towards the stern.



The upper half of the rudder, and the vertical top fin, fallen over on their side.

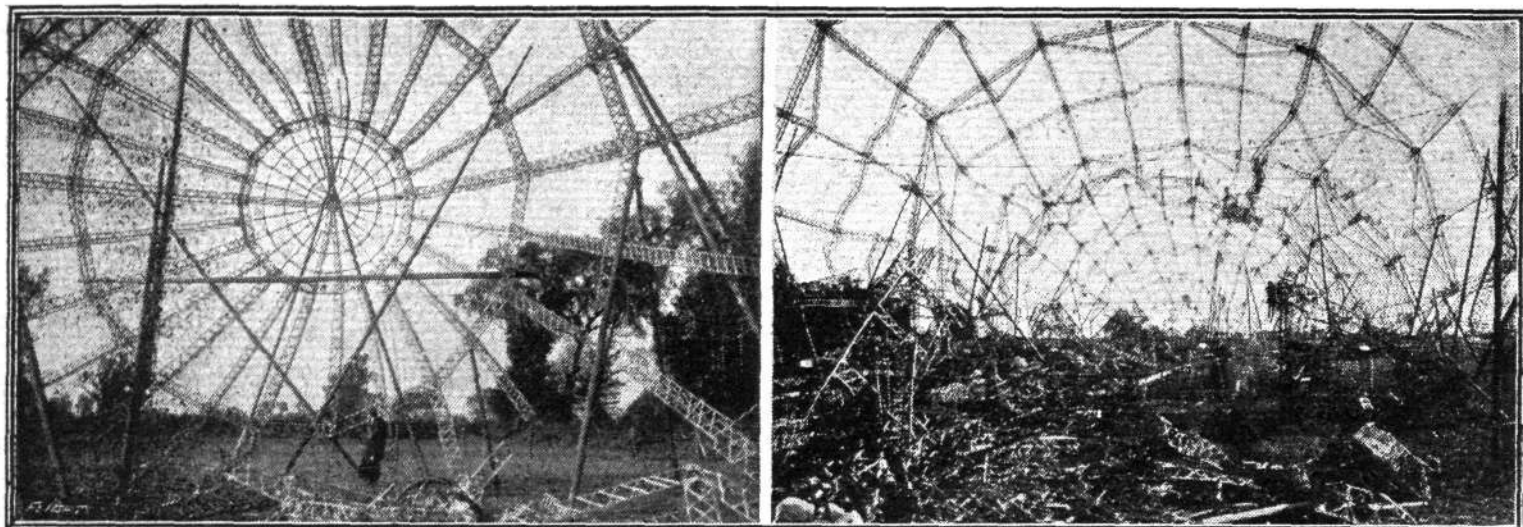


One of the elevators; the curved structure is the quadrant over which the control cables passed.

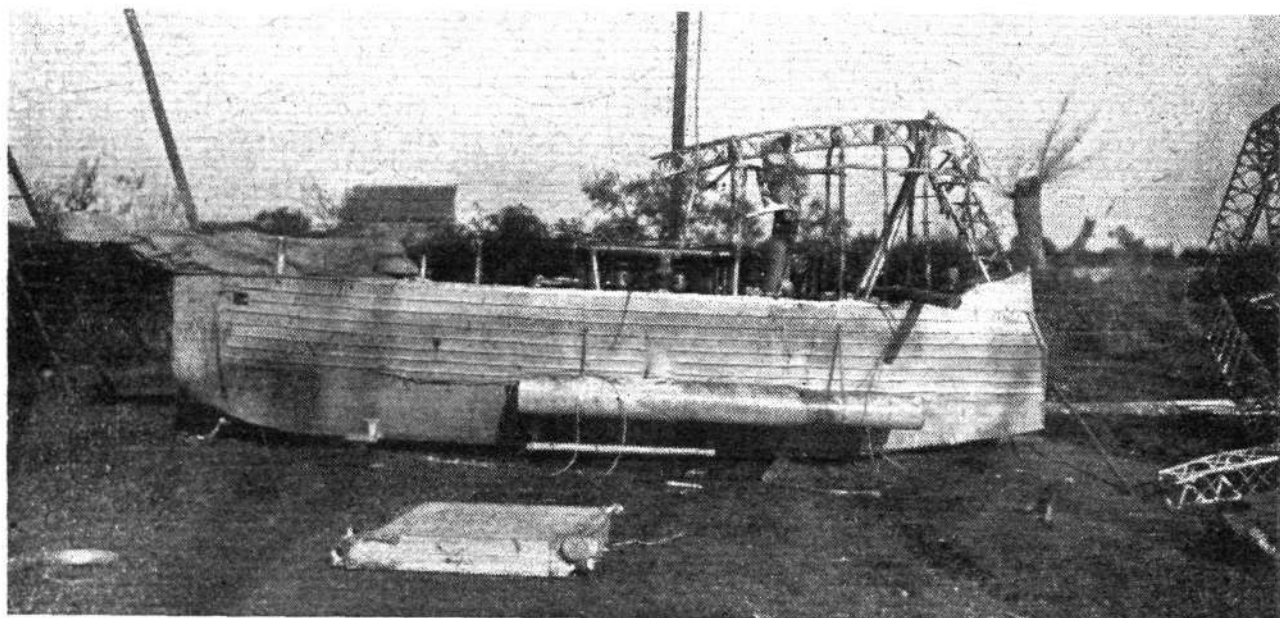
girders and 12 of the smaller ones, giving a polygonal section with 25 sides. Of the larger girders only five run right through to the extreme nose as complete girders. Of these, two are placed at the bottom—one on each side—and one on the top. The other girders do not run right through as girders, their outer corner rail only being carried through to the nose. Reference to the photographs will show the construction.

The Polygonal Girders

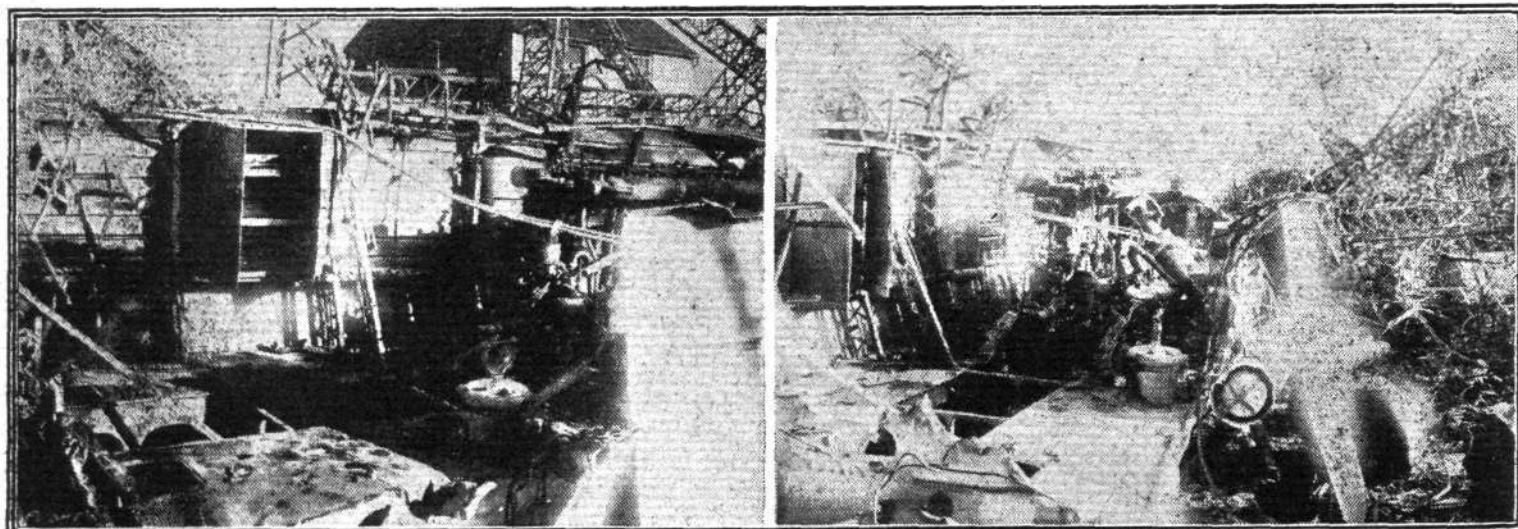
are also of two types. These differ in shape only, the size being the same for the two types. They are of triangular section like the



View of "L. 33" framework from inside of the bow of the airship.—On the right the view is from inside looking towards the stern.

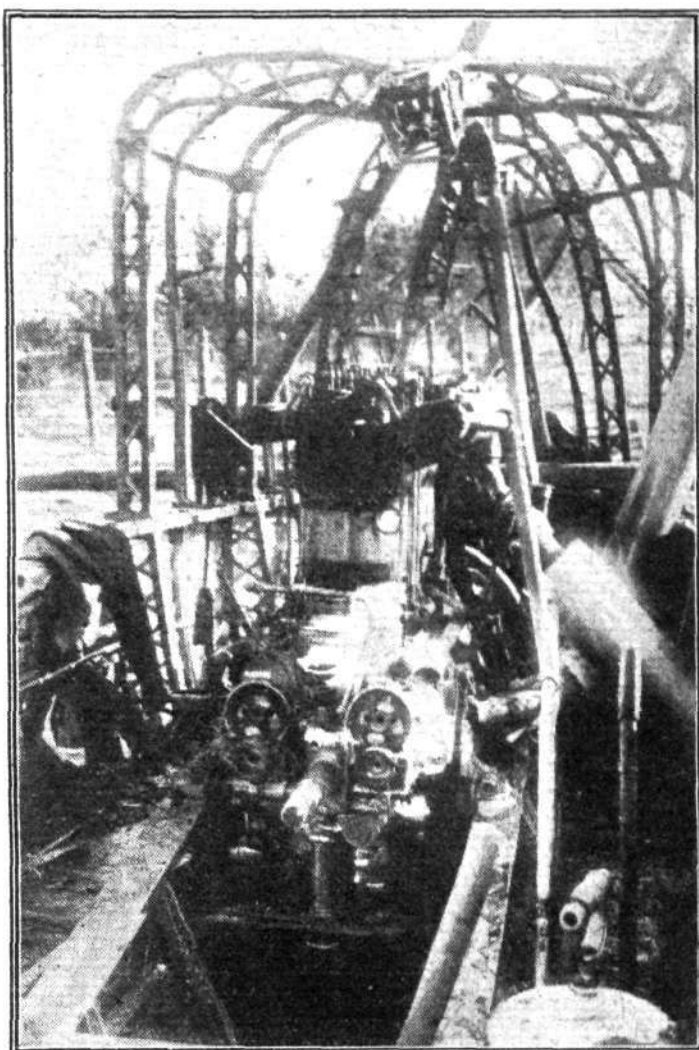


THE PORT SIDE GONDOLA OF "L. 33."—A portion of the superstructure has been cut away. Originally it extended along the whole length of the gondola, windows being fitted at intervals. Near the bow can be seen the gun pivot.

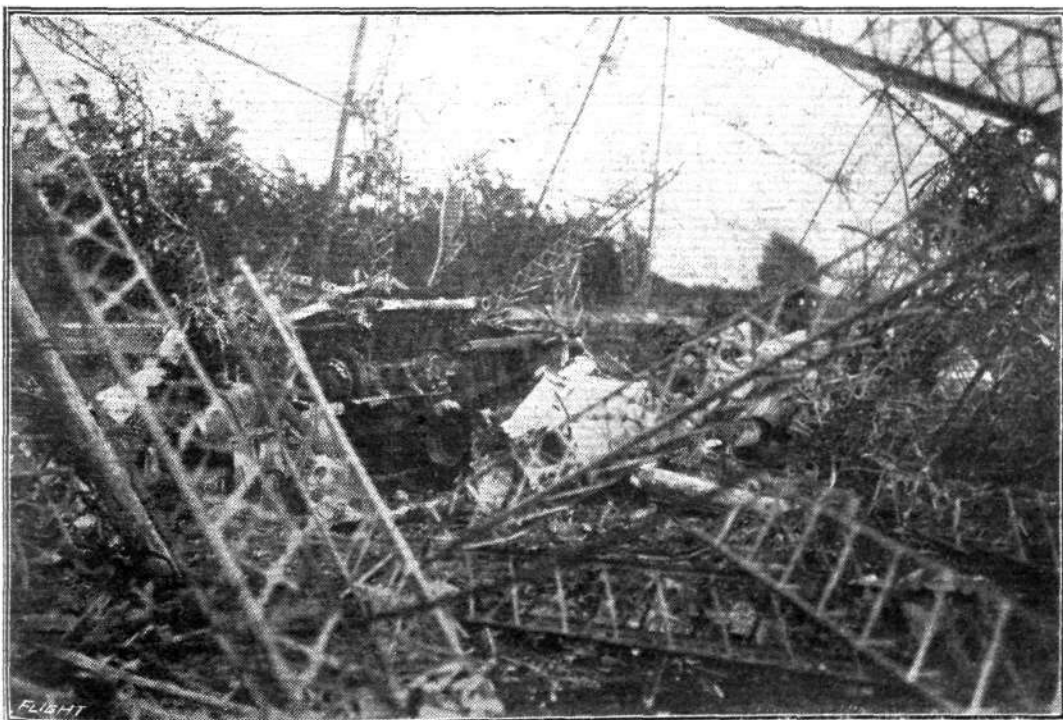


INTERIOR OF THE ENGINE ROOM IN THE FRONT GONDOLA OF "L. 33."—Note the cupboards at the side. In the foreground can be seen the pump by means of which the engine is started. In the right-hand photo. is another general interior view of the front engine room.

longitudinal girders, and braced with the now familiar crosses. The one type has 25 sides, conforming thus to the general section of the airship, while the other has only 13. The latter type is joined with its corners to the larger of the longitudinal girders, the smaller being carried on a kingpost projecting a short distance outside the flat side of the polygon in order to bring it into line with the corresponding corner of the 25-sided polygon. The principle is difficult to explain adequately in writing, but will, we think, be easily understood by reference to the accompanying illustrations. It was mentioned that it was difficult to arrive at the number of ballonnets from counting the number of cells. This is partly due to the fact that each ballonnet extends through two cells. The polygon which has the kingpost bracing occurs between adjoining ballonnets, while the 25-sided polygon is on the lateral centre line of the ballonnet. Some of the joints connecting longitudinal and polygonal girders, and in some instances several others, are very intricate indeed, and must have required great skill in designing. By way of illustration we publish a photograph of one such joint where five girders meet, and where, moreover, some of the cables from which a car is suspended are attached. The anchorage for this cable is a casting, while all the other intricate network is lattice girder. In the larger longitudinal girders the spacing of the bracing crosses is not uniform, the portions occurring at the point of attachment to the polygonal girders having their crosses spaced closer together, so that the ends of adjoining crosses overlap one another. The whole structure is rendered rigid by a system of wire bracing, the rectangles formed by two longitudinal and two polygonal girders being diagonally braced, but the wires not fitted with wire strainers. A long heavy cable runs through from nose to stern through the centre of all the polygons, and to this cable run wires from the corners of the polygons between the ballonnets. The central cable is fitted with tightening arrangements, which, in turn, tightens the radial wires.



Interior view of the Port Side Gondola of "L. 33." The large tube sloping downward from the engine is the exhaust pipe carrying the burnt gases to a silencer placed externally on the side of the gondola. The tube sloping upwards and outwards from the engine carries away the fumes and hot air from the crank cases.



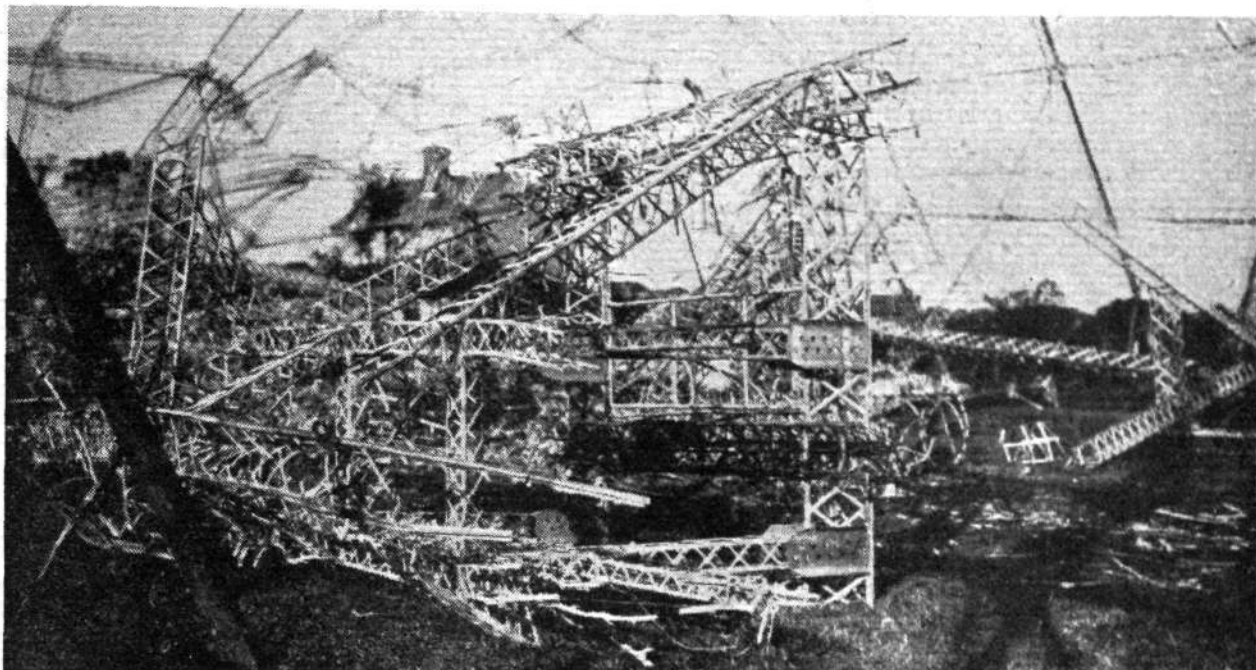
Two engines standing side by side in the rear gondola of "L. 33," which has been somewhat severely "strafed."



CLUTCH AND PROPELLER-SHAFT OF THE REARMOST ENGINE IN THE REAR GONDOLA OF "L. 33."—This engine had been removed when the photograph was taken, but the two other engines, placed side by side in the same gondola, were still in place, as seen in one of our other photographs.



A portion of the "cat-walk" which runs through the greater part of the airship, and which gives access to all sections of the airship.



PORTION OF THE BOMB CHAMBER OF "L.33."—In the photograph it is seen lying on its side. The bombs are suspended in two rows, one each side of the "cat-walk." The rectangular perforated plates are guards which prevent the bombs from catching in the framework.

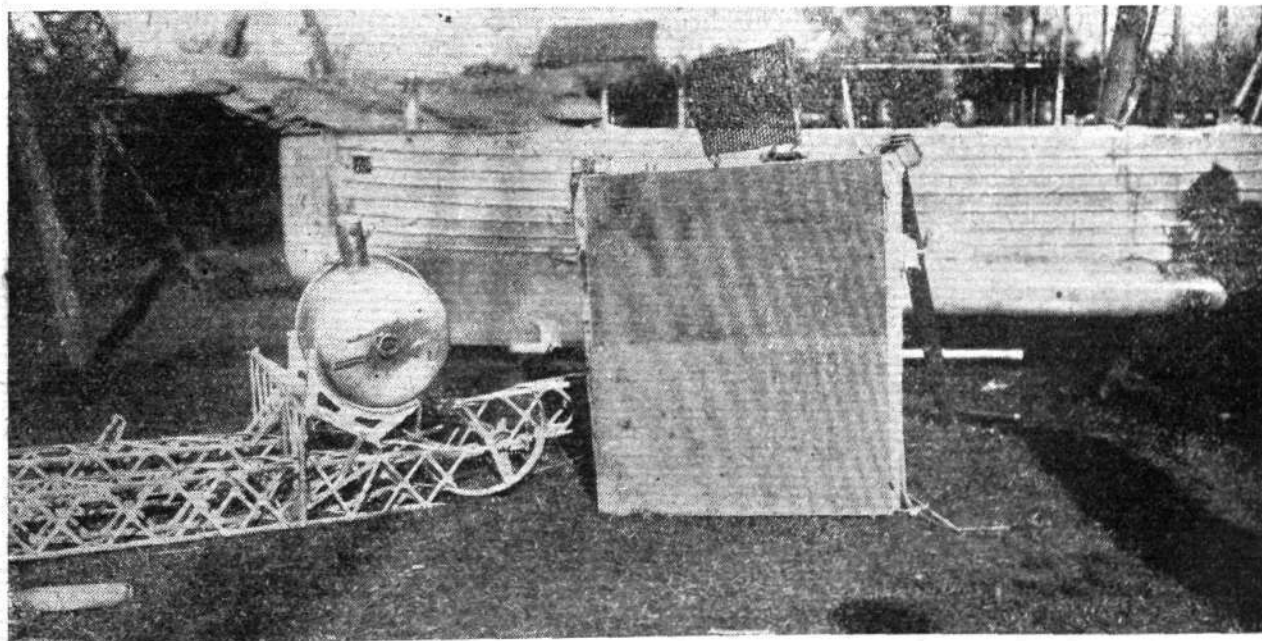
The Ballonnets,

of which, as we have already pointed out, there are 19, are apparently made of some finely woven cotton fabric and doped to make them gastight. They are secured to the girder framework by a cord netting of about 15-in. mesh, which surrounds them. A strange thing in connection with this netting is that a great quantity is still dangling from the top girders, having in some mysterious fashion survived the intense heat of the burning gas. Each ballonnet is fitted with gas valves, of which some can be seen in one of our photographs. Apparently arrangements

had been provided for maintaining and equalising the pressure in the ballonnets, but so far as we were able to ascertain no cylinders with compressed hydrogen for replenishment were found in the wreck.

Power Plant and Transmission.

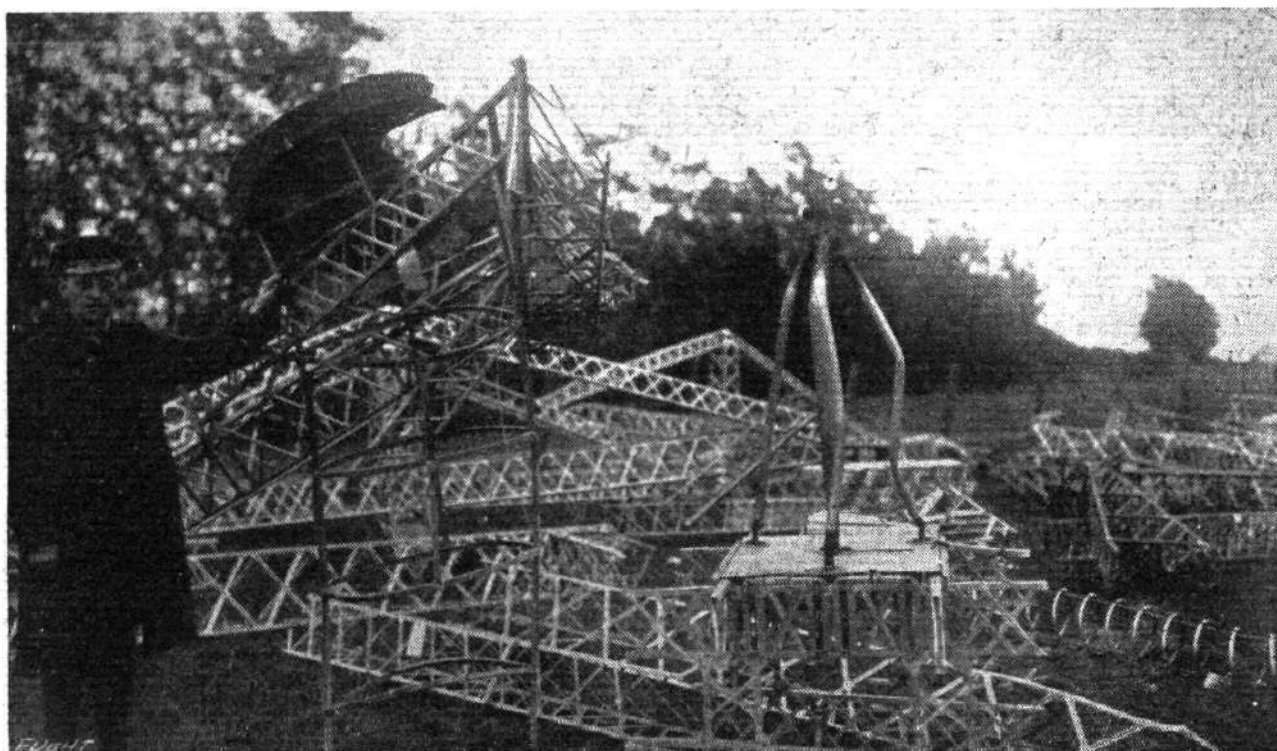
The six engines with which the "L. 33" was equipped were housed in four gondolas—one in the front, one in each of the side gondolas, and three in the rear gondola. They were all of the same type as those exhibited at the H.A.C., and probably developed some 240 or 250 h.p. each. The engine in the front gondola, drives a single two-bladed propeller through



SOME NECESSARY ACCESSORIES OF "L.33."—One of the radiators and its water tank. On top of the radiator is seen a smaller radiator, which is used for cooling the lubricating oil. The large radiator is fitted with a by-pass arrangement, so that the flow of water can be regulated according to the temperature at the different altitudes.

a clutch and reduction gearing. Each of the engines in the side gondolas drives a similar propeller, while the disposition of the engines is slightly different in the rear gondola. Here there are two engines placed side by side in front, each driving through bevel gearing a propeller placed on "A" shaped outriggers some distance up and out from the side of the main hull, while in the rear of the gondola is another engine driving a single propeller immediately behind the stern of the gondola, as in the case of the other gondolas. Each of the engines was fitted with a pump which can be seen in some of the accompanying photographs. This pump is so arranged that it draws in a mixture of petrol and air, and, on the return stroke, forces the mixture into the cylinders of the engine. When the cylinders have received their charge of gas in this manner the engines are started by means of a hand operated Bosch magneto,

a "Y" shaped structure some 50 ft. in length, of which the single arm is secured to the front end of the bevel gear casing, while the forked arms are joined to points on the longitudinal girders of the hull. The construction of this "Y" structure was very pretty, each of the three arms being made up of two very elongated cones welded together in the centre, and each welded along one side. Incidentally these tubes had a fair amount of riveting in them, which at first sight looks somewhat puzzling after the tubes have been closed up, but of course, after thinking it over, various ways suggest themselves in which the riveting could have been carried out. The propellers all appeared to be very similar to those already known to many of our readers through visits to the H.A.C. They were on an average about 17 ft. 6 ins. diameter, and presented nothing particularly interesting either in shape or construction.



THE VENTILATION OF "L. 33."—On the left can be seen one of the ventilating shafts which carry away the gases, and thus render possible the mounting of guns on the top of the airship at both ends. It terminates in a hood projecting beyond the envelope. On the right is seen the tripod mounting of one of the quick-firing guns.

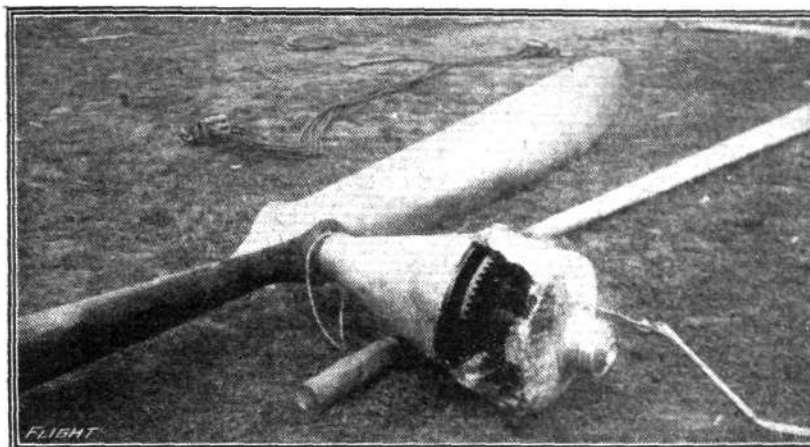
similar to those used on the majority of German aeroplanes. In the front gondola are found several cupboards which evidently contained the food supplies for the crew.

Propellers.

With the general disposition of these we have already dealt. In the case of the front and side gondolas they are placed immediately behind the stern of the gondola, while in regard to those driven from the rear gondola two are placed on outriggers from the sides of the airship, while the third is just behind the stern of the gondola. The mounting of the side propellers is by means of streamline tubes, two pairs, each of which forms an "A," supporting a propeller, one being placed in front of the gear box and one behind it. Thrust ball bearings are provided inside the bevel gear casing, and the thrust is transmitted to the framework of the main hull through

The Control Surfaces.

Another respect in which the "L. 33" was reminiscent of Schütte-Lanz practice was in the arrangement of the tail planes. These were, as nearly as it was possible to judge, symmetrical, the upper and lower fins and rudders being exactly similar, and of the same shape and size as the fixed tail plane and elevator. Rudder as well as elevator were divided to leave room for the conical tail-piece, which projected some distance behind their trailing edges. Constructionally the control surfaces were different from the construction of the hull in that they were built up of rectangular instead of triangular section girders. The control cables passed over quadrants fitted with a groove around their circular portion into which the cables fitted when the movable flap was turned out of the neutral position. Both rudder and elevator were pivoted some distance behind their leading edge, ball bearings being employed.



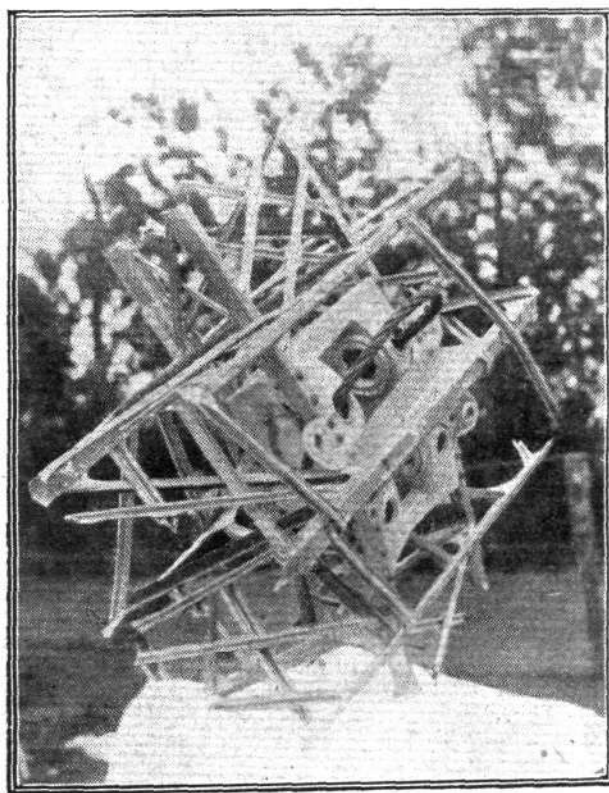
One of the side propellers of "L. 33," with its bevel drive. The damage to the casing is believed to have been caused by our anti-aircraft guns, and may have been in no small measure contributory to the bringing down of the airship, as one of the propeller shafts was found some three miles away from the spot where the airship came to grief. In the right-hand photo. is seen a water ballast release valve.



The Gondolas.

Constructionally the gondolas were built up of a framework very similar to that employed in the construction of the tail planes, *i.e.*, rectangular girders braced with crosses. The lower portion of the gondolas was covered with sheet metal, corrugated in a special way, while their upper part had a girder framework over which was stretched stout

fabric, windows of non-inflammable celluloid occurring at intervals. These windows had been fitted with blinds so that it was possible to have the interior well lighted without risking detection. The front gondola was divided into three compartments, the front one of which was the Commander's station, from where he directed the navigation and the bomb-dropping.



A highly ingenious and very complicated joint in "L. 33," where a number of girders running in different directions meet.



ONE OF THE PETROL TANKS OF "L. 33."—It has a capacity of 78 gallons and weighs only 26 lbs. Note the date, "14.7.16."

In front of him he had the engine room telegraph, switchboard, the various indicators showing the pressure in the ballonets, navigation instruments, &c. On a switchboard were a series of little electric lamps in three colours, red, white and green. When the red light was burning this probably indicated that the trap door in the bomb chamber was closed and that therefore no bombs must be dropped. When the green light was shown this indicated that the trap door was open and that all was in readiness for the corresponding bomb to be released, while the white light was in all probability an indication that the bomb had been dropped.

Behind the commander's cabin was a much smaller one in which had been installed the wireless. This room was separated from the engine room behind it by an air space of a couple of inches, and cotton wool packing was employed to keep out as far as possible the noise from the engines. It is evident that the range of the wireless set carried was comparatively great,

The engine room behind the wireless cabin has already been dealt with, and the side-gondolas will now receive our attention. These were placed some distance up and out from the side of the hull, and had apparently been suspended on stranded cable, while being suitably strutted with streamline struts to give the necessary rigidity. Beyond an engine in the rear portion driving a single propeller, thus incidentally rendering their propellers virtually side propellers, these gondolas contained little of special interest, while the rear gondola was chiefly remarkable for the fact that it contained three engines, two side by side in front and one in the stern. Communication between the various gondolas, gun platforms, &c., was by means of a "cat-walk," a narrow passage running through the greater part of the bottom of the airship. It was, of course, enclosed by the envelope, but only a narrow foot-board some 9 ins. wide provided any foothold. For some distance it ran through the bomb chambers, while near the front and stern it communicated with the ladders leading up to the gun platforms on top of the airship. The "cat-walk," as well as other parts of the airship, were ventilated by tubular shafts running up to the top of the envelope and terminating here in a form of hood or scoop made of three-ply-wood.

Armament.

Some 60 bombs appear to have been carried, slung from two longitudinal girders, one on each side of the "cat-walk." Under each batch of bombs was a

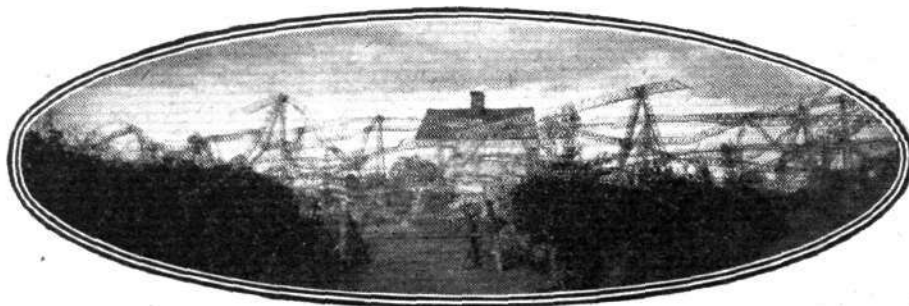
trap door, opened by means of cables passing over pulleys, from the Commander's cabin. At the end of each compartment was a plate or scoop the object of which was evidently to prevent the dropping bomb from catching in any part of the lattice girder, and that they had effectively done so on more than one occasion was evident from the number of scratches on them. The bombs were slung on hooks operated by solenoids from the switchboard in the Commander's cabin.

As regards guns, it appears that nine were carried. Of these the two largest were mounted on tripods side by side on the platform on the roof near the nose of the airship. The tripods were collapsible, so that when the guns were not in use they could be folded down flat and the trap door in the roof closed so as to offer no extra air resistance. A smaller machine gun was mounted on a small platform near the pointed stern. This platform was approximately in line with the trailing edge of the elevator and rudder, so that a good range of fire was obtained. It appears that two more machine guns were mounted in the engine room of the front gondola, one on each side projecting through one of the windows, while the side-gondolas had one machine gun each, the mounting for that on the port side being clearly visible in one of our photographs. These side-gondolas, by the way, were fitted with port lights in the approved naval fashion, that on the port side showing a red light, while the starboard had a green one. In the rear gondola were two more guns, one each side, so that it will be seen that it is by no means easy to approach one of the latest Zeppelins from any quarter without being within the range of several guns. All the more credit to our Zepp. "strafters."

The Ballast

appears to have been in the form of water, contained in tanks mounted in the bottom of the hull. Arrangements have probably been provided for pumping the water from one tank into another, and the valve by means of which the water was released is illustrated in one of our photographs. In addition to the water ballast means were provided, we understand, for equalising the height of fuel in the petrol tanks, thus further tending to enable the trim of the airship to be maintained.

Without actual measurements it is impossible to say what the cubic capacity of the "L. 33" was, but it will probably be found to approach to the 2,000,000 cubic ft. Her speed, with six engines aggregating some 1,500-h.p., was in all probability in the neighbourhood of 60 m.p.h.



Fatal Accidents.

SECOND LIEUT. F. R. Lucas, R.F.C., was killed in Sussex on October 20th through his biplane crashing to the ground. It was stated at the inquest that he was making his first cross-country flight.

Flight Sub-Lieut. A. R. Greenwall died on October 20th from injuries received in Lincolnshire on the previous day.

Lieut. R. C. Vernon-Inkpen, Royal Warwick and R.F.C., was accidentally killed on October 21st.

Through an accident on October 23rd a flying officer was injured and an air mechanic killed.

The Royal Aero Club of the United Kingdom

OFFICIAL NOTICES TO MEMBERS

SPECIAL COMMITTEE MEETING.

A SPECIAL MEETING of The Committee was held on Monday, the 23rd inst., when there were present: Prof. A. K. Huntington, in the Chair; Mr. Griffith Brewer, Mr. Ernest C. Bucknall, Flight-Commander C. F. Pollock, R.N., and the Assistant Secretary.

Election of Members.—The following New Members were elected:—

Ernest Barningham.
Second Lieut. Anthony Fraser Harris Blenkiron, R.F.C.
Gerald Alston Harrison.
Lieut. Thomas Butler Lloyd, R.N.V.R.
Sub-Lieut. George Horsley Porter, R.N.V.R.

Suspension of Entrance Fees of New Service Members.

On the motion of the Chairman, it was unanimously resolved:—

"That on and after the 1st November, 1916, until further notice, Service Members be elected without Entrance Fee."

THE FLYING SERVICES FUND administered by

THE ROYAL AERO CLUB.

The Flying Services Fund has been instituted by the Royal Aero Club for the benefit of officers and men of

the Royal Naval Air Service and the Royal Flying Corps who are incapacitated on active service, and for the widows and dependants of those who are killed.

The Fund is intended for the benefit of all ranks, but especially for petty officers, non-commissioned officers, and men.

Forms of application for assistance can be obtained from the Royal Aero Club, 166, Piccadilly, London, W.

Subscriptions.

	£	s.	d.
Total subscriptions received to Oct. 17th, 1916..	10,863	19	1
Employés of Ruston, Proctor and Co., Aircraft Works (Twelfth contribution) ..	1	10	0
Collected at the Westland Aircraft Works, Yeovil (Fifty-third contribution) ..	0	17	5

Total, October 24th, 1916 10,866 6 6

B. STEVENSON, Assistant Secretary.

166, Piccadilly, W.

AN ECHO FROM A BAVARIAN PRISONER OF WAR CAMP.

THE following very interesting letter has been received from Capt. Thomas Chaloner, 13 Squadron, R.F.C., who was captured on July 1st, 1916, while on a bombing raid. It is addressed to his sister, Miss Cynthia Chaloner, and dated August 8th, 1916, from Kriegsgefangenenlager, Feste Rosenberg, Rosenberg b. Kronach, Bavaria:—

"My Dear,—Many thanks; I was delighted to get yours and Dodo's letters, the first I have had from England.

"I am still in the dark as to what letters of mine you have received so far. In case you have not received them I should like all sorts of foods sent out here—porridge, sausages, egg powders, 'Ideal' milk cream and ham. There is a very good loaf of bread which some of the officers here are getting. The address is, R. Winter, Ltd., Birmingham. It is a good, heavy, stoggy bread, and stands the journey well. You need not be afraid of sending too much at first.

"Your solution of my disappearance was not quite correct. I did not see the thunderstorm or whatever it was, but was engaged by a German at the moment I spotted it coming up, but got away from him, only to meet another about 4 miles further on. He potted at me from about 200 ft. above me for quite a long time before I realised he was firing at me. I thought he was engaging another machine. When I looked up I saw he and I were the only machines in sight, so I realised what was up.

"My realisation was strengthened a moment later when I heard pat, pat, pat, on my left plane, and saw three neat little holes in the plane. I fired a drum at him, having to stand on my tail to do so. He then went ahead of me—I should say he was twice as fast as I was—and came down level with me. I got off half a drum at him then, but he was too far off to be accurate. He then climbed and came over the top of me.

"As far as I could see afterwards he only got one shot into the machine besides the first three, and that hit something on the back of my engine, probably the carburettor. Anyhow my engine cut out and I started to glide. He then followed me down, firing occasional bursts at me, at 5,000 ft. I turned on him again, but having no engine could not keep on him long enough, and only got off 15 rounds or so. My machine made a glorious dive and side-slipped, coming out at about 180 ft. I then landed and was taken prisoner by some infantry, who took me about 10 miles back towards the firing line. Finally, the German Flying Corps sent two officers in a car to rescue me. After a lot of scrapping they

got the better of the German Infantry Staff, who claimed me as their prisoner, and brought me back.

"They then took me back to their mess, where they gave me a very good dinner. The man who had got me down was there, too, and his observer also (the fellow who got poor Monkton, who was in my squadron). Apparently they got 15 machines down that day, 11 of ours and four French.

"They were very nice and took me back to my machine, as I wanted to get my coat and also find out where I had been hit. It was amusing meeting some of those who had the luck to get captured unwounded. Several of them had their shaving kits with them, as we all looked on it as a question of merely whether we should be captured dead or alive. Just as I was crossing the line I met a Morane machine of ours, and he followed me for a few minutes. Then I met a Hun, and looked round for him—the Morane—but he was nowhere to be seen; where he had got to I cannot imagine. I got rid of this machine by going over an anti-aircraft gun which I had seen firing from a town behind the lines. As soon as they started firing at me he left me, and I presume went back to the lines on some job or other.

"Well, this is six pages, so I must stop now. Anyhow, I have little or nothing to write about. Yours,

"TIM."

Once again it emerges from Capt. Chaloner's letter that there is distinct sympathy between the Flying Services of friend and foe of both sides. The reference to the "stoggy bread" of R. Winter, Ltd., Birmingham, is a pretty good hint to senders of parcels to Germany other than to Capt. Chaloner. No doubt the "Winter" bread is a specimen of the sound home-made article, which retains its sweetness long after most bakers' bread becomes uneatable.



A Zeppelin Bomb on Holland.

CONSIDERABLE indignation has been aroused in Holland by the manœuvring of a Zeppelin at a low altitude, and especially by the dropping of a bomb between Gorinchem and Hoogblockland. According to the *Dordrecht Courant*, the missile was a petrol tin, but Mr. Leonard Spray, of the *Daily Telegraph*, in a despatch from Rotterdam, says that it was an incendiary bomb 19½ ins. in diameter, and that it made a hole in the road 2 yards in diameter and rooted up some trees.

A Fleet of Zeppelins Over Norway.

EIGHT Zeppelins are reported to have passed over Hinna, a mile from Stavanger, according to a message from Christianity to the *National Tidende* on Monday.

THE ROLL OF HONOUR.

REPORTED by the Admiralty:—

Accidentally Killed.

Flight-Lieut. L. H. Hardstaff, R.N.

Died of Injuries.

Proby. Flight-Sub-Lieut. A. E. Greenwell, R.N.

Severely Injured.

Sqdn.-Com. R. L. G. Marix, D.S.O., R.N.

Injured.

Proby. Flight-Sub-Lieut. G. G. Bowman, R.N.

Slightly Injured.

Flight-Sub-Lieut. R. J. M. de St. Leger, R.N.

Prisoners of War in Germany.

Flight-Sub-Lieut. C. H. S. Butterworth, R.N.

Flight-Sub-Lieut. C. D. Newman, R.N.

Flight-Sub-Lieut. J. S. N. Rockey, R.N.

Reported by the War Office:—

Killed.

Capt. R. N. Adams, R. Fus. and R.F.C.

Lieut. E. M. Carre, Lincs., attd. R.F.C.

2nd Lieut. L. C. Kidd, R.F.C.

2nd Lieut. F. E. S. Phillips, Devon R. and R.F.C.

Previously reported Missing, now reported Killed.

2nd Lieut. E. D. Steytler, S. Lincs., attd. R.F.C.

Correction.

Lieut. N. A. Browning-Paterson, R.A. and R.F.A., should read

Capt. N. A. Browning-Paterson.

Died.

Lieut. S. Woodrow, Australian Flying Corps.

1147 1st Air-Mech. A. C. Wilson, R.F.C.

Died of Wounds.

8651 2nd Air-Mech. A. Chadwick, R.F.C.

Wounded.

2nd Lieut. F. M. Corry, Sher. Foresters and R.F.C.

2nd Lieut. C. K. M. Douglas, R.F.C.

Capt. T. R. Duff, Argyll and Suth. H. and R.F.C.

2nd Lieut. R. V. Franklin, R.F.C.

2nd Lieut. W. M. Kent, R.F.C.

2nd Lieut. W. E. Nixon, K.O. Sco. Bor. and R.F.C.

2nd Lieut. S. M. Smith, London and R.F.C.

Missing.

Lieut. A. H. M. Copeland, Can. A.S.C., attd. R.F.C.

2nd Lieut. A. R. Crisp, R.F.C.

2nd Lieut. M. Hayne, Lincs. Fus. and R.F.C.

2nd Lieut. F. M. Lawledge, R.E., attd. R.F.C.

Lieut. J. B. Lawton, Buffs. (E. Kent) and R.F.C.

2nd Lieut. N. Middlebrook, Rifle Brig. and R.F.C.

Previously reported Missing, now reported Prisoners of War in German hands.

2nd Lieut. A. Douglas, R.F.A. and R.F.C.

Capt. D. B. Gray, Infantry, attd. R.F.C.

2nd Lieut. V. F. H. Hugill, R. Fus. attd. R.F.C.

2nd Lieut. F. G. Macintosh, R.F.C.

Lieut. V. G. Odling, R. Berks., attd. R.F.C.

2nd Lieut. E. H. Wingfield, R.F.C.

Previously reported believed Taken Prisoners at Kut-el-Amara, now reported Prisoners of War.

7373 2nd Air-Mech. R. G. Nickolls, R.F.C.

7870 2nd Air-Mech. S. J. Wells, R.F.C.

Believed Taken Prisoner at Kut-el-Amara.

3388 2nd Air-Mech. W. Fairhead.



THE "X" AIRCRAFT RAIDS.

In view of the decision of the Government not to allow details of places visited by enemy aircraft to be published, we are, as before, giving to each one an index number. Eventually, when details are available, we shall give the respective information under these index numbers, which will facilitate easy reference to each particular raid.

"X 52" Raid, October 22nd.

THE following *communiqué* was issued by the Field-Marshal, Commanding-in-Chief, Home Forces, on October 22nd, 4 p.m. :—

"A hostile aeroplane approached Sheerness at about 1.45 p.m. to-day, flying very high. Four bombs were dropped, three of which fell in the harbour. The fourth fell in the vicinity of the railway station, and damaged several railway carriages. British aeroplanes went up, and the raider went off in a north-easterly direction. No casualties are reported."

The Secretary of the Admiralty issued the following on October 22nd at 9.30 p.m. :—

"A hostile seaplane was shot down and destroyed this afternoon by one of our naval aircraft. The enemy machine fell into the sea. Judging by the time, it is probably the seaplane that visited Sheerness to-day."

German Version.

Berlin, October 23rd.

"Yesterday afternoon one of our seaplanes successfully dropped bombs on the railway station and docks at Sheerness at the mouth of the Thames."

"X 53" Raid, October 23rd.

THE following *communiqué* was issued by the Field-Marshal, Commanding-in-Chief, Home Forces, on October 23rd, at 12.40 p.m. :—



A Navy Day Gift from Overseas.

By way of celebrating Trafalgar Day, the Patriotic League of Britons Overseas presented £10,000 to the Admiralty to be spent on seaplanes. The money has been subscribed by Britons in the United States, China, Brazil,

"A hostile aeroplane was reported over Margate at 10.5 this morning. Three bombs were dropped in the Cliftonville district of the town. Slight damage was caused to an hotel, and one man and one woman were slightly injured. British aeroplanes went up in pursuit of the raider, who made off in a south-easterly direction."

German Version.

Berlin, October 24th.

"One of our naval aeroplanes yesterday morning bombed the harbour works and railway station at Margate, at the mouth of the Thames. In the afternoon of the same day, off the coast of Flanders, an enemy aeroplane squadron, composed of three seaplanes and two battle aeroplanes, was attacked by two German seaplanes, and put to flight, after fierce fighting. In the course of the battle an enemy seaplane was shot down, Pilot-Master Karl Meyer destroying in aerial fighting from his seaplane his fourth enemy aeroplane. Some time later these enemy aeroplanes, reinforced by six army aeroplanes, returned, but were attacked by eight of our machines, and driven off."

The Secretary of the Admiralty states that there is no word of truth in this message, except that a German aeroplane dropped bombs on Margate, as already reported in this country. What actually occurred was reported in the *communiqué* issued yesterday, viz. :—

"On the afternoon of the 23rd a naval aeroplane attacked four enemy seaplanes off Ostend. Our machine was under fire from all four seaplanes, but succeeded in bringing down one, which was completely destroyed, and in driving off the others, and this British naval machine returned safely and undamaged."

Abyssinia and other foreign countries, and since the outbreak of war the League, in conjunction with the Overseas Club has raised over £82,000 and has been the means of presenting more than 100 aircraft of various types to the Government.

Armchair Reflections by the "Dreamer"

UNDOUBTEDLY we are losing the "pretty" habit. No longer do we toy with things; playfulness is to the children, we are a nation who think only of the things that matter. Because the shops are to close earlier than ever before, I do not get into a pother; I have lost the pretty habit of shop-window gazing. There are things that I require, they come to me in the ordinary course. My food arrives from somewhere which is outside my business, I know only that it is on the table at the proper time. My clothing, scant in its newness as befitting the times, comes by a visit to my tailor. The train brings me to my office in the morning, a conductress takes my small coins when I travel by omnibus. The days come and go, I get all that I require, I require nothing beyond that which I get. We are grown sensible.

We have accepted many things as the inevitable during this upheaval of affairs, there is plenty of room for the majority of them to remain with us to our benefit when the war is ended.

There is little doubt but that the war came just in time to save us from ourselves. A few more years of fooling with pretty habits, and we should have become mentally effete, barren of ideas, worn out by excessive indulgence in the pretty little things that are the undoing of foolish nations.

We had grown accustomed to girls at the telephone exchange. We knew when we removed the receiver from the hook that a female voice would inquire the number of our pleasure, but we would ask in a short and business-like way for Gerrard nought-one-double-nought, without prefix or affix. There was no wanting in courtesy, it was a simple matter of business. When Phyllis first stood behind the hen-coup like opening at the station to issue my ticket, I always said "Please" and "Thank-you" in my best and most courtly manner, although in order to see through the opening I had to stoop in a most uncomfortable and undignified way. To-day I just slam down the money and say the name of the station required. Pretty manners take up valuable time in business hours, and elderly gentlemen who became wise before me are inclined to say cutting things if kept waiting.

There are many women in London to-day wearing trousers. A couple of years ago I should have had to manoeuvre round that word when used with relation to women. They were supposed to be "unmentionables" for reasons unknown. There are, I say, women in London wearing trousers. They are window cleaners, and lamp cleaners, and in some cases van drivers. Not under all conditions are these suitable wear, under some conditions the old

order of things would be absurd. Yet it is of the new order of things, and because women also are losing the pretty habit of being ridiculous, realising that business is business. In countries that had grown sensible before us, women workers in certain vocations had worn trousers for years.

Many things have gone, I hope never to return. We do not require public-houses to remain open well into the following day. Clothes do not make the man (excepting only khaki), although we have been long enough in realising it. The "Pot-hat" has gone to pot. The bird of gay plumage has moulted his pretty waistcoats. We are grown a nation of workers with no use for the pretty habits.

It may well be that the war has pulled the aviation industry out of the fire. Once I wrote in these pages a word of encouragement to those constructors so courageously watching a dwindling bank-balance while they waited for official recognition and help. Possibly some pretty little habits have fallen from the order of things, and stern business necessity pointed to the only possible way of meeting demand. If such a pretty habit there have been, let it pass into limbo with the others, and not come creeping back with the establishment of peace, and the easing off of immediate necessity.

War found us wanting in aeroplanes, and those which we had were wanting in fitness for the purpose for which they were required. It would have been absolutely impossible to have brought things to the present high state of efficiency without the help of the civilian constructor, and the civilian designer.

It is certain that after the war progress in aeronautics will continue with unabating speed. I don't want to see the whole of the industry carried out in huge Government yards, to the exclusion of those who have strained every nerve to place our Flying Services where they are to-day.

I have not yet lost the pretty habit of grumbling, although there are signs of its abatement. People point to our Navy, and draw my attention to the fact that our battleships are not all erected in Government yards, and wonder that I should wonder whether aeroplanes will be. Still, I say I don't know. There are some pretty little habits still with us; we have not lost them all yet. And one of them used to be—I will put it that way—the habit of imagining that brains could not possibly be covered by anything but a tin-hat. Tin-hats and pot-hats, gold braid and blue overalls, it is all one so that we get that which we require, and anyone of the various wearers could be equally clever in the other's clothing.



AIRISMS FROM THE FOUR WINDS.

SOME captured German aeroplanes, besides three Hun guns, will form one of the features of the Lord Mayor's Show on November 9th. The R.F.C. will also be represented.

REPRISALS are "barbarous," so the Germans claim, when practised on them. Already, at the mere suggestion of such deserved "reciprocity," the fear of God has taken hold of the inhabitants of several promising cities, where there are quite a number of quite historical edifices to tick off. Munich, Strassburg, Mannheim, Mainz, Cologne, Bonn and Metz are amongst the towns where the leading lights are seeking obscurity in subdued lights. Karlsruhe—where a sample has been left already—goes as far as holding a nightly service for Divine protection. Much quicker and more certain if they agitate for their own authorities to conform to the elementary rules of warfare between civilised nations. The prohibition of the ancient Xmas Fair at Mannheim for fear of raids is about as big a shock to the gentle Hun as could well be delivered. Yes, it certainly looks as if "reprisals" is the only remedy.

VISCOUNT GREY was sincerely convincing in his *résumé* of the start and conduct of war during his speech the other night at Foreign Press Association luncheon. His lordship is a great believer in the influence of science for good to this country in the future. His Council of Peace has great promise in it, especially as it would appear he advocates its backing with the wherewithal to enforce its edicts. It should carry a good deal of weight until another Hunnish combination fancies it is strong enough to try conclusions with the rest of the world. As Lord Grey put it tersely, the leading functions of this Council of Perfection would be to prevent the indiscriminate use of high explosives to destroy great cities and combatants and non-combatants alike, all these things which have been done in this war—the introduction of poisonous gas and disease. It will, he said, need all the efforts of belligerents and neutrals after the war to see that the inventions of science are used in the future in the air, on the land and on the water, not for the destruction of mankind, but for its welfare.

To which we subscribe without qualification. But let us nevertheless not be caught unready again.

HOLLAND appears to be in a quandary over the latest exploits of Zeppelins above Dutch soil. Cruising around over their military works is hardly a matter for joying about, even if the "bomb" which was dropped proves to have been a petrol or bully beef tin for which the Herr Commander had no further use. Even a worm will turn, and no doubt in time we shall have the Netherlands demonstrating that they at least are not too proud to fight.

It is to be hoped a fairly accurate account of the amount brought in by airship relics for the Red Cross "Our Day" Fund will be available presently, as it should be as gall and wormwood to the All Highest to know that he not only lost his mammoth aircraft, but that it realised somewhere about its cost value for a cause of mercy, to the benefit of Britons.

THAT "something" will happen before over long in connection with the Air Board which was so recently created, would appear to be a sure thing amongst those who are in touch with how matters aeronautical are shaping. It looks as if, once again, its formation was but still another trick to temporarily assuage public clamour. From the first it was evident its road would be thorny for want of executive powers. Promises, of course, there were in plenty to let the Board do what it pleased, but—well, it's the same old tale again, and naturally ructions threaten. Whether the Parliamentary Air Committee will help to postpone the trouble, or, what is more likely, hasten it, is a matter of opinion. Their views of the situation are contained in the following resolutions passed last week:—

"1. That the Air Board should be so reconstituted as to include representatives of the Ministry of Munitions and the aircraft manufacturing trade.

"2. That the provision of material for the R.N.A.S. and the R.F.C. should be placed under the single control of the Air Board.

"3. That Mr. Balfour be asked to receive a deputation from the entire Committee as to the future policy of the Admiralty in regard to the R.N.A.S."

AN electric gun for bringing down Zeppelins sounds fascinating, and we join in Judge Atherly-Jones' wish that the inventor may speedily make a fortune from his invention. There's a fly in the ointment though, as usual. The inventor put his possession forward when brought up in the City of London Court as a judgment debtor, as a means of liquidating all his debts presently.

QUININE three times a day or going into Army training are remedies suggested by Dr. Wynn Westcott to a man who confessed that Zepp. raids scared him.

MORE peaceful application of aeroplanes. Last week, seeing a wagonette overturned at Wisley, Surrey, a pilot at once flew to Brooklands Aerodrome for assistance, with the result that an ambulance arrived quickly at the scene of the accident. The wagonette was conveying 14 Ripley members of the Surrey Volunteer Regiment to Merstham for trench digging, when a wheel came off, resulting in all the party, except one, being injured and cut by broken glass, five being removed to hospital.

PRINCESS CHRISTIAN, who is always to the fore when any good work requires support, has generously contributed £530 towards the equipment of the new premises in Bryanstone Square of that splendid institution, the Royal Flying Corps Hospital. Amongst recent donations to the hospital is also a cheque for 50 guineas from Messrs. Armstrong-Whitworth. But the accommodation and support is, unfortunately, even now all too small for the cases which press upon the resources of the establishments, and further expansion is imperative in the near future. The success which has attended this hospital from its inauguration must be a source of gratification to those who have and still are giving unceasingly not only substantial sums to meet expenses, but personal help in the conduct of the hospital.

ONE month in prison will doubtless teach William Jackson, a railwayman, that it is inadvisable to make false statements about Zeppelin raids. He was overheard on a tramcar.

A GOOD deal of speculation as to the exact method employed by the crew of "L.33" for setting her on fire when she came to grief in Essex on September 24th has been going on. Some people seem to imagine that all that is necessary is to fire a few revolver shots into the tanks, and there you are. As a matter of fact, of course, the mere firing of revolver shots into the tank will not necessarily set it on fire, and a much more ingenious method was, we understand, employed. In several places around the wreck right away from the petrol tanks, there were little marks on the ground where the grass had been burned away, and a little tin found among the wreckage gave the clue to how the fire was probably started. The little tin, was fitted with a lip, much after the fashion of the common or garden variety of sardine tins, and pulling this lip opened the tin. Inside was found a quantity of powder, which, on being sprinkled on the ground, burst into flames. Evidently a number of these tins are carried, and when the moment came members of the crew emptied the powder out on the ground under the Zepp., and, being started at various points at once, one can imagine that the fire was not long in spreading.

It appears probable that the primary function of the incendiary tins was not so much for starting fires as for facilitating navigation at night. A few tins dropped into the sea would furnish sufficient light from which to get an idea of drift, &c., so as to not rely altogether on dead reckoning. By observing the path of the airship over these lights the real course and, as a matter of fact, the "ground" speed could be ascertained, and navigation consequently made very much easier.

THE sugar scarcity has many sides to it. If there is the real shortage which is claimed, why then in the name of common sense is not the manufacture of sweets and kindred



Sir D. Haig on Air Work.

IN his review of the operations from October 3rd, issued from General Headquarters on October 19th, General Sir Douglas Haig says:—

"The weather during the course of the operations reviewed has been consistently unfavourable for aircraft. Heavy rains and strong south-westerly winds have lowered the visibility, and have rendered their work most difficult. Yet in spite of such adverse conditions, our machines have made many valuable reconnaissances, and have repeatedly attacked with success enemy lines of communications, ammunition dumps and troops on the move. A captured document emanating from a German Army Headquarters, in acknowledging the superiority of the British airmen, suggests methods of reorganisation whereby it is hoped that 'it will be possible at least for some hours to contest the supremacy in the air of the enemy.'

"Assisted by our aeroplanes, our artillery has continued to play a notable part in the fighting. It has established and maintained a clear superiority over that of the enemy. It has supported our infantry attacks, and has disorganised the enemy's arrangements behind his front lines, and hindered the arrival of his reserves and supplies. It allows him no rest by day or night, and materially assists in that wearing down of his moral, which is vital to success in battle."

"Farming" Out "Air-Mechanics."

ETON RURAL TRIBUNAL has passed a resolution strongly protesting against the scandal of young bachelors passed for General Service, and who are neither pilots nor skilled mechanics, being allowed to join the Air Services. It is stated that the comparatively insignificant duties of these men could be as efficiently performed by C3 men or men over military age. It was stated that at one aerodrome there are 700 young men farmed to one contractor. Each is earning £2 a week civilian pay, and obtaining the separation allowance as well. When the day's work is done strings of cabs take the men to picture palaces.

Nailed to the Counter.

THE following semi-official note was issued by the Belgian authorities at Havre on October 21st:—

"On the occasion of the raid on the centre of German aviation and military aeronautics in Brussels carried out at the end of September by English airmen, a number of civilians were killed and wounded and some damage was done to property. The German Press gave currency to the report that their casualties were due to the lack of skill of the English airmen and to their missing their aim. Information, however, is now to hand from Brussels through an uncensored channel, according to which the bombs dropped by the airmen hit their targets accurately, and the losses of life in question, no less than the damage to property, are attributable to the firing of the German artillery. The Belgian Government has in its possession material proofs confirming the truth of this (consisting of fragments of German projectiles)."

Sequel to Brussels Raid.

SOME details as to the capture of the British pilot who failed to return from the Brussels raid are given by the *Maastricht Nouvelles* as follows:—

"After dropping five bombs on the Louvain-Tirlemont railway, the aeroplane was forced to descend owing to the failure of the engine during the night at Neerwinden. It was neither heard nor seen. The pilot and the observer attempted to re-start the engine, but without success, and they therefore set fire to it to prevent it falling into the enemy's hands. They then succeeded in hiding, and eluded capture until

"luxuries" restricted and regulated? There appears to be no limit to confections, which are almost blatantly in evidence all over London; but when it comes to our hospitals having to go short—and very short at that—then it is about time for the authorities to realise that there is a screw loose somewhere—they look to it that it is not *their* screw. This question may appear to have nothing to do with matters aviatric, but don't you believe it. To our sorrow we have reason to know in a degree how many of our flying men have to seek the shelter of the overworked hospitals. That such a soothing necessity as sugar should be found wanting in such circumstances does not reflect much credit upon the controlling powers that be.

Tuesday, October 17th, when a squad of German soldiers appeared at the house of a schoolmaster in a small Flemish commune and arrested the two men in the school-house, where they had passed the night. The schoolmaster was also arrested on a charge of complicity, and the prisoners were then removed by rail."

Another German Fable.

IN an official telegram sent out from Berlin on October 21st, it was stated:—

"On Saturday afternoon a German seaplane squadron successfully bombed English naval forces off the coast of Flanders. A hit was observed with certainty on one of the destroyers. All the aeroplanes returned safely, despite heavy firing."

The Admiralty, on October 23rd, issued the following:—

"There is no truth in the statement, contained in a report from Amsterdam of a Berlin official telegram dated October 21st, that a British destroyer operating off the coast of Flanders was hit by a bomb dropped from a German seaplane squadron."

And yet Another Zeppelin Fairy Tale.

IT was not to be expected that the German newspapers would be content with the official accounts of the raids of September 23rd and October 2nd, and so a most circumstantial account has been given out of the gigantic damage alleged to have been caused in England. According to this, in the first raid a hundred houses valued at £2,000,000 were reduced to heaps of ruins. Regent Street completely collapsed. An ammunition factory in South London was destroyed. Liverpool Street Station railway bridge and lines were so damaged that repairs will take some time. The Underground line to Piccadilly was closed for three days. In the course of the second raid two hundred families were rendered destitute. Twenty houses in Maple Street were damaged. At Thames-haven benzol tanks were greatly damaged, and the rice storehouses of Denny and Sons destroyed. At Grimsby, barracks were hit, and over four hundred soldiers killed. On the Humber a big cruiser was hit. At Leeds great havoc was done among the ammunition factories, railway stations, &c.

With reference to the above, the Press Bureau states: It is almost needless to say that this account of what is supposed to have been the result of this raid on land buildings is a ludicrous fiction. With reference to the Navy, the Secretary of the Admiralty states that there is not a word of truth in the statement that a "four-funnelled cruiser and two or more warships were damaged, and that sixty men were killed on board the four-funnelled cruiser in the Humber." No warship or merchant ship or any men belonging to the Royal Navy or to the mercantile marine were touched by Zeppelin bombs. The whole story is a fabrication.

Successful French Flyers.

THE list of French flying men whose names have been mentioned in despatches is as follows, writes the *Daily Telegraph* correspondent in Paris:—Second Lieutenant Guynemer has brought down eighteen enemy machines; Second Lieutenant Nungesser, seventeen; Sergeant-Major Dorme, fifteen; Second Lieutenant Navarre, twelve; Sergeant-Major Lenoir, eleven; Lieutenant Heurtaux, ten; Sergeant Chainat, nine; Lieutenant Deullen, eight; Second Lieutenant Chaput, eight; Second Lieutenant De la Tour, seven; Second Lieutenant Pegoud, six (killed in action); Second Lieutenant De Rochefort, six (killed in action); Sergeant-Major Tarascon, six; Sergeant-Major Bloch, Sergeant Viallet, Sergeant Sauvage, Sergeant-Major Lufbery, American, and Sergeant-Major Flachaire, each five.



Casualties.

Captain N. A. BROWNING-PATERSON, Royal Artillery and R.F.C., who is reported killed, was the younger son of Dr. A. Browning-Paterson, Coningham House, Uxbridge Road, W., and was 22 years of age. He was reported missing on July 21st, and is now officially stated to have been killed in an aerial action while leading a patrol over the enemy lines. Captain Browning-Paterson accompanied the first Expeditionary Force in August, 1914, as Second Lieutenant, taking part in the retreat from Mons and subsequent battles, receiving mention in despatches by Viscount French. He was transferred while at the Front to the Royal Flying Corps as Observer in September, 1915, and was gazetted Flight-Commander on July 3rd.

Captain JACK COOPER, R.F.C., who was officially posted as missing on July 21st, is now reported by the Geneva Red Cross to have been shot down and killed on that date over the German lines whilst on a bombing expedition. He was 20 years of age, and was the youngest son of Lady Cooper, of Ossemsley Manor, Christchurch, Hampshire. Captain Cooper was educated at Lockers Park and Harrow, and returned from Australia for the war. He joined the Royal Flying Corps, and got his commission in January, 1915.

Second Lieutenant L. C. KIDD, M.C., R.F.C., killed on October 12th, aged 23, was the second son of Dr. Cameron Kidd, of Bromsgrove, Worcestershire. Educated at Bromsgrove School, he took his pilot's certificate at Hendon before the war, and was tea-planting in Ceylon when war was declared. He returned as soon as possible, and was at once given a commission in the Royal Flying Corps, and after a short period of home training went to the Front in February last. Since then, with two short intervals of leave, he has been flying continuously at the Front. He was awarded the Military Cross only last week. His elder brother, G. P. Kidd, is a Captain in the R.A.M.C., and has been at the Front with a field ambulance since early in 1915.

The death in action is announced of Lieutenant FENTON PHILLIPS, M.C., R.F.C. He was the eldest son of the Rev. E. S. Phillips, Rector of Bow, Devonshire, for some years Curate of St. James' Church, Hampton Hill. Lieutenant Phillips a few weeks ago was awarded the Military Cross for an act of bravery while engaged on air service. He served in the trenches for some months with the Artists' Rifles, and subsequently transferred to the Royal Flying Corps.

Lieutenant JAMES AITCHISON STEWART, R.F.C., who has died from wounds, was 26 years of age, and the eldest son of Dr. Robert Stewart, 25, George Square, Edinburgh. He leaves a widow, who resides in Wiltshire. Lieutenant Stewart was educated at Edinburgh Academy and Edinburgh University. Before the war he held a commission in the 7th Royal Scots, but resigned it in May, 1914. Immediately on the outbreak of war he was appointed to a commission in the King's Own Scottish Borderers, and after being at the Front for a time was invalided home with rheumatism. Subsequently he was transferred to the Royal Flying Corps.

Lord Montagu and the Air Board.

IN the course of a farewell address at Brockenhurst on Saturday, Lord Montagu, who is returning to military duty in India, naturally touched on aerial topics. He said the present position of the Air Board was far from satisfactory. It had no real powers and was openly flouted by the Admiralty. How long was Lord Curzon going to tolerate this somewhat absurd position? Before long both the country and Parliament would demand that some more real powers should be given to the Board.

He received the wound which caused his death in a fight in the air.

Missing.

Flight-Sub-Lieutenant C. D. NEWMAN, reported missing, is a son of the Rev. C. H. Newman, Vicar of St. Mark's, Sunderland. He was a student at the Medical College, Newcastle, when war broke out. After serving as a Surgeon-probationer for a year, he was transferred to the Royal Naval Air Service. He went to France only five weeks ago.

Married and to be Married.

An engagement is announced between Mr. FREDERIC ARTHUR DARIEN GRACE, Second Lieutenant, R.F.C., late of San Pedro de Jujuy, Argentine, eldest son of Mr. and Mrs. A. A. Grace, of Alberdi, Santa Fe, Argentine, and SYBIL MAY, youngest daughter of Mr. and Mrs. HERBERT APPERLY, of Highwoods, Kingswood, Surrey.

The engagement is announced between ROBERT MILLINGTON KNOWLES, Norfolk Regt. and R.F.C., younger son of the late Andrew Knowles and Mrs. Knowles, of Taverham Hall, Norwich, and OLIVE MARJORY, younger daughter of Major and Mrs. J. A. BERNERS, of Hellesdon House, Norwich.

A marriage has been arranged between RONALD ST. CLAIR MCCLINTOCK, R.F.A. and R.F.C., youngest son of Mr. and Mrs. Arthur McClintock, of Rathvinden, Leighlin Bridge, Ireland, and MARY GORDON (MILLY), elder daughter of Mr. and Mrs. JOHN MACGREGOR LAIRD, formerly of Birkenhead, at present at the Hyde Park Gate Hotel, Kensington Gore, S.W.

The engagement is announced between Captain DOUGLAS CHARLES LEYLAND SPEED, King's Royal Rifles and R.F.C., younger son of Major and Mrs. Elmer Speed, of Knowlton Court, Canterbury, and 23, Prince's Gate, and MYRTLE, second daughter of Sir HENRY and Lady DERING, of Surrenden-Dering, Kent.

Items.

Lieutenant W. EARDLEY HARPER, R.F.C., who has received the Military Cross for conspicuous skill in aerial combats, is the son of Canon Harper, formerly Rector of St. Margaret's, Leven, and St. Peter's, Kirkcaldy.

Lieutenant G. S. M. INSALL, V.C., R.F.C. (who was brought down and taken prisoner about a week before the announcement of his V.C., which was awarded him for an achievement in November of last year), has just undergone a serious but successful operation for appendicitis at Heidelberg, and is now well on the road to recovery. This is the second serious operation performed on him while in captivity, the first being the extraction of a large fragment of anti-aircraft shell from the base of the spine. It is satisfactory to learn that he is receiving good attention.

Mr. NORMAN PRINCE, one of the American volunteer pilots with the American Squadron fighting in France for the Allies, who has just died in hospital behind the lines in the Vosges district, was wounded during one of the recent air raid fights against the Germans. He struck his head against a telegraph wire in falling, and died from hæmorrhage of the brain.

The recent raids on this country showed that our Home defences had improved, but it would be simply folly on our part because we had brought down four of the raiders if we did nothing more in the way of defence.

Lord Montagu also said that he thought the Admiralty were very seriously to blame with regard to airship construction. While the German Fleet was an eyed fleet, we had to a very great extent a blind one, but he believed that at last the Admiralty were doing something to accelerate progress.

AIRCRAFT WORK AT THE FRONT.

OFFICIAL INFORMATION.

British.

General Headquarters (France), October 17th, 10.26 p.m.

"The clear weather of yesterday gave scope for great aerial activity. Our machines made a large number of reconnaissances, and bombed enemy railway lines, stations, billets, factories and depôts. There were numerous fights in the air, three enemy machines being destroyed, another driven to earth and many dispersed. Two enemy kite balloons were attacked and forced down, one being afterwards seen in flames. One of our machines was brought down by anti-aircraft gunfire, and six others have not returned."

General Headquarters, October 18th, 9.38 p.m.

"Yesterday, besides many reconnaissances, our aircraft carried out three bombing raids against enemy communications, in which railway stock and station buildings were damaged and a train hit and derailed. There were many fights in the air, in the course of which four enemy machines were driven down damaged, and one fell into a lake. Four of our machines have not returned."

War Office, October 19th.

"*Egypt.*—On the Eastern Front a reconnaissance against the enemy at Moghara, 65 miles east of Samailia, has been carried out by a mounted force."

"After an engagement lasting two hours, during which our aeroplanes repeatedly bombed the enemy main positions, we succeeded in driving him out."

"Valuable information as to the dispositions of the enemy and the nature of the country was obtained."

Admiralty, October 21st.

"On the morning of the 20th inst. a naval single-seater aeroplane attacked and brought down a hostile kite balloon near Ostend. The balloon descended in flames. A similar machine engaged a large hostile double-engine tractor seaplane, shooting both pilot and observer. The seaplane side-slipped and dived vertically into the sea two miles off Ostend. The remains were later seen floating on the water. Both our machines were undamaged."

General Headquarters, October 21st, 10.55 p.m.

"Yesterday, the weather being clear, much successful work was done by our aircraft. We bombed enemy communications, and attacked among other points an important junction and an ammunition depôt, and derailed four coaches of a train. There was continuous fighting in the air, in which three enemy machines were destroyed and many others driven down in a damaged condition. Two of our machines are missing."

General Headquarters, October 22nd, 9.12 p.m.

"During yesterday's fighting our aeroplanes did valuable work in locating enemy batteries. Five enemy machines were destroyed, and four others driven down in a damaged condition. Three of our machines are missing."

General Headquarters, October 23rd, 9.40 p.m.

"Yesterday our aeroplanes bombed two railway stations behind the enemy's lines, hitting a train in motion and doing much damage to buildings and rolling-stock."

"Seven enemy machines were brought down and many others forced to land in a damaged condition. Eight of our machines have not returned."

French.

Paris, October 17th.

"Our aeroplanes carried out numerous fights in the region of the Somme. They fought 65 engagements, in the course of which two enemy machines were brought down and three others came precipitately to earth in their own lines."

"German aeroplanes dropped several bombs on Amiens without doing any military damage."

Paris, October 18th.

"In spite of misty weather, our fighting aeroplane service displayed activity during the 17th. Three enemy aeroplanes were brought down on the Somme front. One fell in the direction of Aizecourt-le-Haut, the second to the east of Bouchavesnes, and the third, attacked by Lieut. Heurteaux, crashed to the ground between Rosquigny and La Transloy, bringing the number of aeroplanes brought down by this pilot to nine up to to-day. One of our aviators, who was attacked by three Fokkers between Roye and Lassigny, brought down one of his opponents and put the other two to flight."

Paris, October 19th.

"Yesterday our machines during the operations to the south of the Somme attacked with machine guns the enemy troops in the region of Biaches. It is confirmed that Adjutant Dorme brought down on the 16th a German aeroplane to the north of Péronne, this being the fourteenth machine for which this pilot has accounted. Another enemy aeroplane which was reported to have been badly hit on the same day fell to the ground and was dashed to pieces near Beaulencourt."

Paris, October 21st.

"Yesterday our chasing aeroplanes had numerous combats, in the course of which seven German machines were brought down, three of them in our lines. The latter fell between Bouchavesnes and Rancourt, the four others in the region of Moislains and Brie. Lieut. Heurteaux, who brought down one of them, has accounted for his tenth German machine. Four other enemy machines which were badly hit after fights with our pilots were obliged to come down in their own lines."

"During the night of the 20th one of our squadrons dropped 41 bombs of 120 mm. (3½-in.) on the stations of Noyon and Chauny, and afterwards more bombs were dropped on a train between Appilly and Chauny. On the same night 15 of our bombarding aeroplanes dropped 79 bombs of 120 mm. on the enemy cantonnements and bivouacs in the region of the Nesle-Ham and on the aviation grounds at Matigny and Slez, which were hit."

Paris, October 22nd.

"On the Somme front our aviators yesterday brought down three German aeroplanes. Five others were forced to land in a damaged condition. During these fights Adjutant Dorme brought down his fifteenth enemy machine at Barleux, and Sergt. Flochaire his fifth machine, which was dashed to pieces on the ground in the same district. To the north of Verdun a German captive balloon which was attacked by one of our pilots fell in flames."

"During the night of the 21st six of our aeroplanes bombarded the railway station of Courcelles to the east of Metz. 180 bombs of 120 mm. were dropped on the buildings and on the lines, and appeared to have caused much damage. During the same night our squadrons dropped 50 bombs on the railway stations of St. Quentin and Tergnier, 16 bombs on bivouacs in the district of Etain, and 126 heavy bombs on the railway stations at Ham and Ethies and the aviation sheds in the region of Péronne. During yesterday a German aeroplane was brought down in our lines by the fire of our special guns."

Paris, October 23rd.

"This morning German aeroplanes dropped several bombs on Lunéville. There were no victims, and the material damage was insignificant. On the Somme front yesterday two German aeroplanes were brought down and three compelled to alight in a disabled condition. Yesterday 24 of our machines dropped 4,200 kilogrammes (over 4 tons) of bombs on the blast furnaces of Hagondange and of Pussanges (north of Metz), on the railway stations of Thionville, Mezières-les-Metz, Longwy, and Metz-Sablons. They attained their objective. On the same day another of our air squadrons bombarded an ammunition depôt at Mons-en-Chaussee (Somme). Finally, last night a bombing expedition against the factories of Rombach and the railway station of Mars-la-Tour achieved good results."

"This morning some German aeroplanes dropped several bombs on Nancy. There were no casualties, and only slight damage was done."

Russian.

Petrograd, October 19th.

"In the region of the village of Potutory (south of Brzezany) an enemy aeroplane fell after being hit by our artillery fire. The machine caught fire as it struck the ground. The aviators were taken prisoners."

Italian.

Rome, October 18th.

"Hostile aeroplanes dropped bombs on Borgo Carinzia and on our lines east of Gorizia without doing any damage."

"Our airmen destroyed an enemy kite balloon at Castel San Giovanni (Ivanigrad), east of Comen (Carso)."

"French and Italian squadrons of seaplanes in the course of a general reconnaissance, boldly carried out by them along the west coast of Istria on Monday afternoon, succeeded, in

spite of unfavourable weather, in successfully bombarding detached naval units near Rovigo, as well as military works at Rovigo, and at Punta Salvore. At one point they became engaged in a fight with enemy aeroplanes, and damaged two of them, one of which was seen to fall headlong into the sea. In spite of enemy artillery fire all the seaplanes returned safely to their bases."

Rome, October 19th.

"Hostile aeroplanes attempted to bombard the bridge over the But, in the neighbourhood of Tomezzo, without success."

Rome, October 23rd.

"On both sides aircraft were engaged in reconnaissance work. As the result of an air fight which took place over the Frigido (Vippach) Valley an enemy Albatros aeroplane was brought down."

German.

Berlin, October 17th.

"Our battle airmen shot down six enemy airmen, and three of them fell behind the enemy's lines."

"Capt. Boelke again put *hors de combat* two enemy machines."

CORRESPONDENCE.

After the War and the German Trade-War Spectre.

[1929] Germany's intention to obtain an initial advantage in the fight for the world's trade is plainly seen in the social and economic reconstruction that has been proceeding throughout the Fatherland side by side with the country's gigantic efforts on all the war Fronts. In nothing is this idea of Germany more plainly seen than in the latest scheme announced, by which the great armouring firm of Krupp, with its scores of thousands of mechanics, is to be linked up with the North German Lloyd Steamship Lines. The Essen firm has now purchased an interest in the Steamship Company, and one of its directors is to have a seat on the board.

When war broke out official Germany had so organised its machine shops that only the pressure of a button was required to switch all the works on to munition making. All that is happening now shows that at the psychological moment the same procedure will be adopted, with this difference—German machinery will make wares for the world's marts instead of munitions for the Fatherland.

The adroit move of Krupp and the steamship company is not a mere private commercial transaction. It has a much wider significance, of which we in this country should take due note. While Teuton submarines have been busily engaged sending to the bottom as many British ships as possible, existing German craft have been safely interned in home or neutral ports. Meanwhile German shipbuilders have been steadily building new vessels for the mercantile marine, some of them of 20,000 tonnage.

It is Germany's ambition to emerge from the war, even if beaten, as the first shipping power in the world, and the new link forged between Essen Works and Bremen ships is another move in a well-matured plan to realise this aim.

The question naturally arises in one's mind whether we as a nation shall once more be caught napping. The British Government has had to be whipped into action in many directions, and even to-day it seems next to impossible to close up German businesses in Britain long since marked down for extinction. How far positive progress has been made by any of the Government committees appointed to consider questions of After-the-war-trade it is impossible to say, since not one of the committees has issued a report. Months ago there was noticeable activity in certain industries, chiefly in the formation of trade associations, but this seems to have died down.

Wise men judge the future by the past, and, adopting this formula, we shall probably find that British trades and industries will progress and flourish just in proportion as they concentrate their energies *now* upon perfecting their organisations and co-operating in a commercial campaign conducted in every corner of the world. In a word, our industries will rise or fall according to the wisdom and the extent of the efforts of their organisers.

So far as the motor engineering industry is concerned, we feel that it will require a far more powerful effort than has yet been put forth if it is to cut a creditable figure in the

Berlin, October 18th.

"Five enemy aeroplanes were brought down in the course of aerial fighting."

Berlin, October 20th.

"Fifteen out of 40 British and French aeroplanes reached Oberndorf and dropped 60 bombs. The remainder of the hostile aeroplanes were dispersed by the attacks of our airmen, and dropped bombs at random on woods, meadows and small villages. Neither at Oberndorf nor elsewhere was any military damage done. Work at the Mauser factory was not interrupted. The three persons who were killed and the seven who were injured were all hit in the open air. Of the 40 aeroplanes, our airmen and anti-aircraft guns shot down nine. The following pilot and observers were killed: Guerinau, Baron Georges Jouan and Marchand. The following were made prisoners: Rockey, Sterdic, Bouet, Delcroix, Buckerworth, Nottay, Newman, Vittyn. The names of four of the occupants of the machines that were brought down could not be ascertained. No German machine was lost and no aeronaut was killed or wounded in the action."

impending trade war, and anything that the Government can do to strengthen the position will be heartily welcomed.

BARIMAR, LTD. (Scientific Welding Engineers).

C. W. BRETT,

Managing-Director and General Manager.

10, Poland Street, Oxford Street, W., Oct. 20th.

The Supporters of the Aeronautical Institute.

[1930] With reference to the paragraph in your current issue headed "The Aeronautical Institute and its 'Supporters,'" in which it is said that Lord Montagu understands that the Institute is using his name although he had withdrawn his support from it, we would ask you to be good enough to publish the enclosed letter which we wrote to Lord Montagu on the 13th inst., as well as a copy of his letter to us, and which explains clearly our position with regard to him.

It is hardly necessary to add that, after our letter to Lord Montagu, we lost no time in removing his name from our list of supporters, who, with one or two exceptions, are members or donors or both, and that on Monday, the 16th inst., the nearest possible day after our communication to him, we had a new list of supporters printed, from which we had removed the names of two retiring supporters, as the enclosed two printed lists—the old one and the new one—will show you.

L. BLIN DESBLEDS,

Oct. 20th.

Hon. Director and Hon. Secretary.

(Enclosures.)

62, Pall Mall, London, S.W.

October 12th, 1916.

Dear Sir,—Please see that my name is removed at once from your list, as I wish to sever all connection with the Aeronautical Institute, and to point out that I desire that in future my name shall not be used in any way by your Society, and I would bring to your notice that I have never given any authority that it should be used for any purpose whatever.

Kindly acknowledge this letter.

Yours truly,

L. Blin Desbleds, Esq.

(Signed) MONTAGU.

3, Arlington Street, St. James's, S.W.

October 13th, 1916.

Dear Sir,—In reply to your note of the 12th inst., we shall, of course, do as you wish and remove your name from our list of supporters.

We desire, however, to tell you that we do not understand the tone of your communication, and that the only way we can account for it is that it was written under some misapprehension, the origin of which we cannot fathom.

Unless you, yourself, furnish us with an explanation warranting the tone of your note, we cannot, of course, pretend to regret the removal of your name from our list.

We would remind you that on February 19th, 1916, we received a letter informing us that you had "pleasure in supporting" the work of the Institute.

You may be assured that in any list of supporters printed after to-day's date your name will not appear.

Yours faithfully,

(Signed) L. BLIN DESBLEDS.

Lord Montagu of Beaulieu.

AVIATION IN PARLIAMENT.

Alleged Defective Aeroplanes.

IN the House of Commons, on October 10th, Mr. H. A. Watt asked the Secretary of State for War whether complaints have been received of the machines provided for the use of a squadron of the Royal Flying Corps which was due to leave for the Front; whether these machines are a British copy of a successful French design; whether they have been reported as inherently unstable and dangerous in landing; whether only two of these out of five arrived safely in a recent squadron flight from one aerodrome to another; and what steps he proposes to take in the matter?

Major Baird (representing the Air Board): The first trial of the aeroplane referred to in my hon. friend's question gave rise to certain criticisms. It was therefore sent to the Expeditionary Force for further trial in comparison with French-built machines of the same type, and the report on it was favourable except for two minor matters which are being attended to. The reply to the second part of the question is in the affirmative. As regards the third part, I am informed that the machine is not inherently unstable, and not unduly difficult to land, though no doubt not a beginner's machine. Nothing is known of the incident referred to in the fourth part of the question. I may add that exactly the same type of machine is and has been for some time past constantly and successfully used against the enemy by the Royal Naval Air Service.

The Design of the "Tanks."

QUESTIONED in the House of Commons on October 18th by Capt. Burgoyne, the Parliamentary Secretary to the Admiralty (Dr. Macnamara) said: There is no doubt that the idea of employing armoured cars for trench warfare occurred independently to several people, and all that the Admiralty can do is to state what appears in the Admiralty official records. According to these, the idea was suggested to officers of the Royal Naval Air Service by their experience of the naval armoured cars in Flanders in the early days of the war. After various experiments by the officers of the Royal Naval Air Service, my right hon. friend (the late First Lord) instructed Mr. d'Eyncourt, the Director of Naval Construction, to undertake the design of a "Tank" or landship, capable of carrying out certain definite performances.

The officers of the Air Department at the Admiralty primarily concerned were Commodore Sueter, Wing Commander W. Briggs, and Squadron Commander T. G. Hetherington. While the principal credit for the design of the "Tanks" now being employed at the front rests with Mr. d'Eyncourt, the latter has mentioned the following gentlemen as rendering him valuable assistance:—Mr. W. O. Tritton, Managing Director of Messrs. W. Foster and Co. Ltd.; Lieut. D. G. Wilson, R.N.A.S. (now Major Wilson, M.G.C.); Mr. P. Dale Bussell, Contract Department, Admiralty; Lieut. A. G. Stern, R.N.A.S. (now Lieut.-Col. Stern, M.G.C.); Capt. Symes, M.G.C.; Mr. F. Skeens, Acting Assistant Constructor.

Compensation for Raid Injuries.

SIR E. CORNWALL, in the House of Commons on October 18th, asked the Prime Minister whether the Government propose to establish a satisfactory system of pensions or grants in cases where, as a result of injuries or loss of life arising out of Zeppelin raids, the families affected are reduced to straightened circumstances or left unprovided for?

The Prime Minister: It is not proposed to make any alteration in the system whereby provision can be made against such losses by insurance under the Government scheme.

Mr. Hogge: Has the Prime Minister considered the case of people who have their relatives killed? Does he not think that a woman whose husband and all her sons who have worked for her have been killed by Zeppelin bombs in this country should have some sort of provision made for her by the State?

The Prime Minister: Perhaps my hon. friend will give me notice of that question.

Mr. W. Thorne: May I ask whether it is correctly reported in the papers that the Government have taken responsibility where men in factories and workshops are killed and injured through bombs in aircraft raids?

The Prime Minister: I should like to have notice of that question.

FROM THE BRITISH FLYING GROUNDS.

Grahame-White School, Hendon.

CIRCUITS with Instructor last week: Lieut. Kaizer. Circuits alone: Messrs. Robertson, Steeves, Green, Woods, Travers, Whiteman, Lord, Norris, Hitchcock, Ranson, Sutherland, Munro, Rogers, Saunders, Styles, and Zambournis.

Instructors: Messrs. Manton, Winter, Pashley, Hale, and Biard.

Hall School, Hendon.

PUPILS at work last week:—With Gerald Smith: Messrs. Bateman, Lambert, Barton and Smith. With Cecil M. Hill: Messrs. Dutton and Cowell, Lieut. Malden, Mr. Bateman and Sergt. Jones. With Fred J. Glegg: Messrs. Blake, Pugh, Course, Mayer, Heathcote, Yuill and Foster. With Stanley G. Cownie: Messrs. Gamble, Lester, Todd, Rogers and Hewett.

Royal Aero Club certificates successfully passed by Mr. Bateman, Sergt. Jones, Messrs. Cowell and Lambert Barton.

Hall Government-type tractors in use.

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An "Aerial" Work of Art.

THERE were few visitors to the Royal Academy Exhibition this year who were not impressed by the wonderfully realistic oil painting by Lieut. F. Gordon-Crosby depicting the destruction of a Zeppelin by the late Lieut. Warneford, V.C. The picture has now been reproduced by the four-colour process, and the result is a delightful work of art. In the print that real sense of atmospheric beauty—so great a feature of the original—is very happily reproduced, and the feeling of distance has lost none of its effect. The delicate colouring of the landscape, stretching far below, has also been



retained. It is certainly one of the finest aviation pictures so far produced, and the publisher, Mr. W. R. Deighton, 4, Grand Hotel Buildings, Charing Cross, W.C., is to be congratulated upon his enterprise and judgment. It is to be hoped that the reception of the print will be sufficient to encourage Mr. Deighton to publish other "air" pictures. The facsimile—the size of the print being 15 by 10 ins.—is priced at 5s. per copy, and we understand that a few signed artist's proofs are available to early applicants at one guinea each. The small block which we give of this picture gives a faint idea of the fascination of the work of Mr. Gordon-Crosby.

SIDE WINDS.



THE Society of British Aircraft Constructors, Ltd., have adopted a device for use by members of the society on their notepaper, &c., indicating membership. Naturally as aviation would suggest, the old-fashioned monogram has been avoided and an artistic emblem evolved, as may be judged by the reproduction of the device.

MOTOR RADIATORS, LTD., who make and repair any type of radiator for aircraft or car work, announce that they have moved their offices and works in Hanway Street to their main premises, 80, Faroe Road, Kensington, W. They are, however, retaining their Hanway Street place as a receiving depot.

TAPES of all sorts and sizes are a speciality of Messrs. John MacLennan and Co., of 30 and 31, Newgate Street, London, E.C., an enterprising firm who have been quick to realise the requirements of the aircraft industry as regards "smallware." They also cater for the electrical trade, and among the goods which they can supply may be mentioned silk tapes for insulating; fine Egyptian tapes for insulating, binding and transformer; grey and white India dynamo tapes for insulating and binding; cotton webs and banding; tubular braids and casing to cover electrical wires; hemp binding cord ($\frac{1}{2}$ -lb. cord); flax kite cord (No. 1 kite cord); linen sewing thread—all to pass A.I.D. inspection.

WITH a view to the centralisation of effort, the Navarro Aircraft Co., Ltd., are giving up their London office at the end of the week. All communications should in future be addressed to the head offices of the firm at Burton-on-Trent.

ALWAYS anxious to assist their friends as much as possible, the Fellowes Magneto Co., Ltd., have sent out a little map and full instructions as to the best ways of getting to their new works at Cumberland Avenue, Park Royal, Willesden, N.W. In making a note of this change of address, it should also be remembered that the 'phone call is now Willesden 1560 and 1561. This is also a reminder that this firm, which has had a unique experience in the repairing and manufacturing of magnetos for many years, is now in possession of their extensive new works, which have been laid out and equipped for turning out magnetos in large quantity. By the consistent quality of their magnetos, which are greatly in demand for aircraft engines, the firm has built up a splendid reputation, and perhaps the best testimonial which the firm could have is that the new works have already proved too small and considerable extensions are now found to be necessary. These are now well in hand.

THOSE whose memory takes them back to the Aero Show at Olympia in 1911 will recall the beautifully-made tandem monoplane exhibited by Messrs. William Cole and Sons, the woodwork of which aroused admiration far and wide. At that time unfortunately the firm found no encouragement to go on with their enterprise, but times are changed, and seeing an opportunity of utilising their highly skilled workmen for the benefit of aviation and the nation, Messrs. Cole have again taken up the work. Not only woodwork but also metal parts are being turned out in the works, and in order to give full scope to their efforts all their coachbuilding business is being cleared out. At present attention is being concentrated on parts such as wings, parts, elevators, &c., but before long it is hoped that arrangements will be complete for the machines to be built throughout. It is almost needless to add that the craftsmanship which had made Cole coachwork a hall-mark of quality, is seen at its best in the new department. Not only has the firm in its splendid and extensive stock of well-seasoned timber a most valuable asset, but the wide and extensive experience of Mr. Albert Cole, and all who are associated with him, is a great advantage. The shops are all room and light, and therefore admirably adapted for aircraft work, while in the metal working shops their present comprehensive installation of machine tools is being rapidly added to. One advantage is the handiness of the firm's establishment in the Hammersmith Road.

COMPANY MATTERS.

General Aviation Contractors, Ltd.

THE statutory meeting of the creditors of the above-named Company was held at 48, Watling Street, E.C., on Tuesday, the 24th inst., when practically all the creditors were present, either personally or by proxy.

The liquidator (Mr. W. A. Casson) presided, and a resolution was passed confirming his appointment as liquidator.

An alternative resolution was proposed by representatives of Mr. Domenic Lawrence Santoni to the effect that an application should be made to the Court for the appointment of another liquidator, but this was negatived on a vote.

The liquidator stated that there were very few creditors of the Company, and that he expected that all *bona fide* claims would be paid in full.

He stated that the Company now had no business to carry on as its interests in other companies had been disposed of and the goodwill of its aviation business had been sold to the General Aeronautical Co., Ltd., directly after the commencement of the war. Litigation was pending against Mr. D. L. Santoni for an account of his dealings with certain of the Company's interests in the Societa Anonima Costruzione Aeronautiche Savoia and the Agenzia Generale Forniture Aeronautiche, Italian companies, and for the return of considerable sums of money which, it was alleged, had been improperly paid away. An action was also pending against Messrs. Osborn and Osborn, the late solicitors of the Company, for an account of certain transactions in which they had been concerned.

The liquidator said that one of the principal objects of the liquidation was to bring to an end the influence that Mr. Santoni had exercised in the past on the Company's affairs. Of the three actions that had been brought, one of them related to the transfer of a liability incurred by Mr. Santoni to the Company, although the Company never was a party to the contract. It was an action for £550 against Mr. Santoni for moneys which he had from the funds of the Company, whilst he was holding the position of managing-director. That and other actions that had been commenced against Mr. Santoni would be pursued with vigour.

The proceedings closed with a vote of thanks to the liquidator.

Aeronautical Patents Published.

Applied for in 1915.

Published October 12th, 1916.

- 13,575. E. R. CALTHROP. Captive balloons.
- 17,437. A. A. HOLLE, A. W. JUDGE, AND VARIOPLANE CO. Aeroplanes.
- 3,368. L. BONGIOVANNI. Reversing-device for braking aeroplanes.
- 12,820. G. A. OGRISSEK AND J. JAWORSKY. Air-craft.
- 15,079. W. LOVE. Dirigible balloons, or airships.

Applied for in 1916.

The numbers in brackets are those under which the specification will be printed and abridged, &c.

- 10,358. H. MIDDLETON. Fin or wing motion and mechanisms. (101,403.)
- 1,467. S. F. SAUNDERS. Aircraft. (101,434.)
- 4,511. T. D. KELLY. Planes for aeronautical machines. (101,442.)
- 2,647. R. CAUDRON. Controlling devices for aeroplanes.
- 4,897. N. L. SYBERG. Flying machine fuselages.

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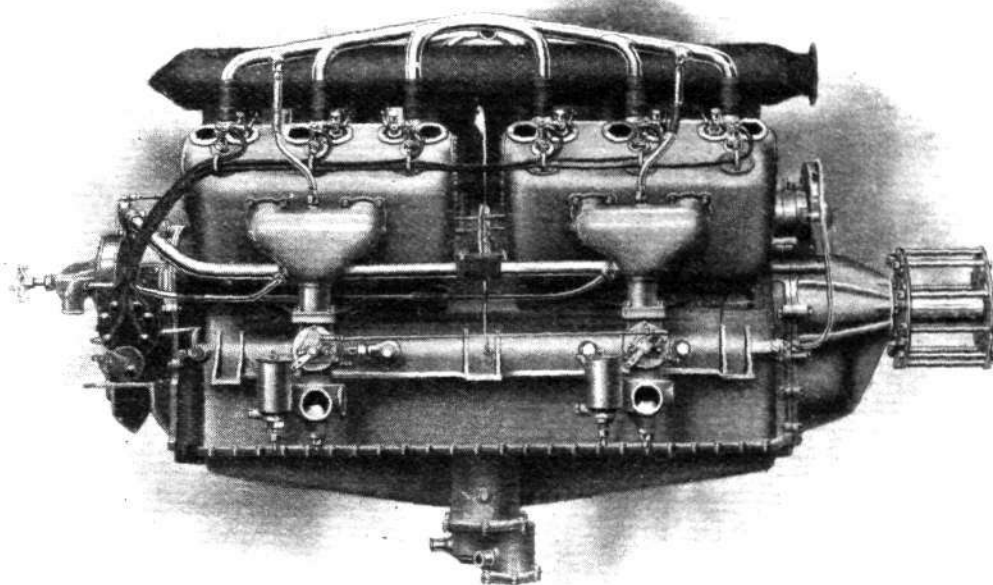
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